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# Development of Basic Data & Knowledge Regarding Organic Removal Capabilities of Commercially Available Home Water Treatment Units Utilizing Activated Carbon: Phase 3 - Supplemental Data

Gulf South Research Inst.
New Orleans, LA

Prepared for

Environmental Protection Agency
Washington, DC

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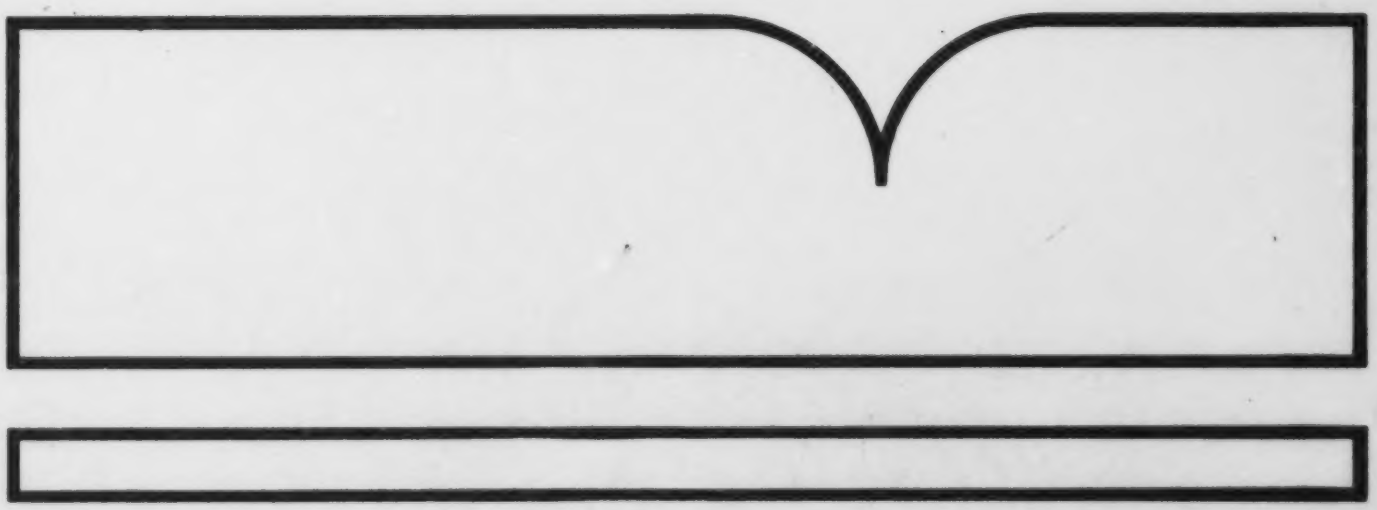

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# DEVELOPMENT OF BASIC DATA AND KNOWLEDGE REGARDING ORGANIC REMOVAL CAPABILITIES OF COMMERCIALLY AVAILABLE HOME WATER TREATMENT UNITS UTILIZING ACTIVATED CARBON

Phase 3/Final Report - Supplemental Data

Submitted to:

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Frank Bell, Project Officer: The supplemental data report contains the detailed test data.

16. ABSTRACT

An extensive study of commercially available home water treatment units has been conducted over a 3-year period to examine organics reduction and microbiological factors.

The Phase 3/Final report provides a summary of Phase 1 and 2 results as well as detailed reporting of Phase 3. Phase 3 included the testing of 10 selected activated carbon units against a ground water spiked with carbon tetrachloride, trichloroethylene, tetrachloroethylene and 1,1,1-trichloroethane and of the same units against a surface water spiked with the above and with p-dichlorobenzene, hexachlorobenzene and chlordane; field studies (Miami, Fla.; Pico Rivera, Calif.; Atlanta, Ga.,; and Detroit, Mi.) on four units; home tests on three units; bacterial leaching studies; spent carbon study; studies of limited value on four other units (reverse osmosis, ozonator, ultraviolet). Test data on two distillers had to be discarded because of technical problems.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
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## PREFACE

The supplementary data section has been compiled to reduce the bulk of the Phase 3/Final Report and includes data tables not essential to the reading of the report. In this supplement, the original data are reported along with several groups of tables which describe series of test runs for each of the units. A brief description of the groups of tables is provided to aid the reader in data review. The supplemental data are arranged in three categories: 1) organic chemical data, 2) biological data, and 3) miscellaneous data.

### ORGANIC CHEMICAL DATA

The organic chemical data are divided into three categories corresponding to the major types of organic analyses employed in Phase 3: 1) halogenated organics, which include trihalomethanes (HO), 2) nonpurgeable total organic carbon (NPTOC), and 3) nonpurgeable carbon adsorbable organic halide (NPCAOX).

Tables S1, and S3 (pages 1 and 4) list the results from the chemical characterization of the various challenge waters used during Phase 3 studies. Tables S4 through S23 (pages 6-25) list influent and effluent concentrations of specific HO compounds at various intervals during the rated lifetime of 10 carbon filters in the groundwater study. Tables S24 through S51 (pages 26-53) list influent and effluent concentrations of THM and NPTOC at various intervals for 4 carbon units tested in the 4 city field studies. Tables S52 through S54 (pages 54-57) list influent and effluent concentrations of THM and NPTOC at various intervals for 3 carbon units tested in the home studies. Table S55 (page 58) list the NPCAOX data for all carbon units tested in the groundwater study.

### BIOLOGICAL DATA

The biological supplemental data is divided into three groups: 1) standard plate count (SPC) data, 2) endotoxin, and 3) miscellaneous data. Table S2 (page 2) list the daily bacterial and chlorine properties of influent (control-loop) samples during the test period of the groundwater unit studies. Tables S56 through S65 (pages 62-71) present the SPC, endotoxin, silver, and chlorine data for each of the 10 carbon units in the groundwater study. Tables S66 through S81 (pages 72-87) present the SPC, endotoxin, silver, and chlorine data for 4 carbon units tested in the 4 cities of the field studies. Tables S82 through S84 (pages 88-90) present the SPC, endotoxin, silver, and chlorine data for the 3 carbon units tested in the home studies.

MISCELLANEOUS DATA

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TABLE S1. TOTAL HALOGENATED ORGANICS AND NONPURGEABLE TOTAL ORGANIC CARBON CONCENTRATIONS IN SPIKED GROUND WATER

| Date | Total Chlorinated Hydrocarbons (ppb) | | | | | NPTOC |
|---|---|---|---|---|---|---|
| | $CCl_3CH_3$ | $CCl_4$ | $CHCl{:}CCl_2$ | $CCl_2{:}CCl_2$ | Total | |
| 06/02/80 | 52.3 | 15.0 | 28.7 | 42.4 | 138 | 686 |
| 06/09/80 | (53.4*) | (15.7*) | (28.7*) | (41.8*) | (140*) | 335 |
| 06/10/80 | (53.4*) | (15.7*) | (28.7*) | (41.8*) | (140*) | (335) |
| 06/11/80 | 54.5 | 16.7 | 28.7 | 41.2 | 141 | 863 |
| 06/16/80 | 40.0 | 13.6 | 31.9 | 31.6 | 117 | 303 |
| 06/18/80 | 40.0 | 14.4 | 35.7 | 29.1 | 119 | 388 |
| 06/24/80 | 26.1 | 9.7 | 29.5 | 25.0 | 90.3 | 416 |
| 06/25/80 | 33.7 | 12.6 | 38.0 | 34.5 | 119 | 298 |
| 06/30/80 | 48.6 | 17.1 | 47.6 | 35.3 | 119 | 210 |
| 07/01/80 | (49.3†) | (17.6†) | (51.6†) | (38.4†) | (157†) | (251†) |
| 07/05/80 | 50.0 | 18.0 | 55.7 | 41.5 | 165 | 292 |
| 07/06/80 | 59.4 | 22.8 | 60.9 | 29.9 | 173 | 280 |
| 07/07/80 | 58.2 | 21.9 | 60.9 | 31.2 | 172 | 223 |
| 07/09/80 | 48.5 | 19.1 | 46.8 | 33.7 | 148 | 295 |
| 07/10/80 | 57.5 | 20.7 | 51.0 | 35.5 | 165 | 324 |
| 07/11/80 | 43.4 | 15.1 | 45.1 | 34.9 | 139 | 302 |
| 07/15/80 | 56.9 | 18.8 | 52.6 | 37.8 | 166 | 350 |
| 07/16/80 | 39.3 | 15.8 | 48.2 | 42.1 | 145 | 176 |
| 07/21/80 | 46.8 | 15.4 | 46.3 | 38.3 | 147 | 277 |
| 07/22/80 | 45.9 | 14.9 | 45.1 | 39.0 | 145 | 296 |
| 07/24/80 | 43.9 | 14.3 | 43.9 | 36.7 | 139 | 286 |
| 07/25/80 | 38.5 | 14.2 | 49.7 | 35.6 | 138 | 281 |
| 07/26/80 | 47.6 | 18.0 | 58.3 | 45.0 | 169 | 290 |
| 07/29/80 | 49.6 | 18.7 | 61.4 | 44.5 | 174 | 285 |
| 07/30/80 | 20.0* | 5.9* | 28.2* | 16.7* | 70.8* | 071 |
| 07/31/80 | 26.4* | 8.7* | 36.2* | 22.3* | 93.6* | 290 |

†Sample was not collected.

*Malfunction of metering pump in the spiking system. Both malfunctions occurred on consecutive days; therefore, minimum impact on overall influent levels on respective units on manifold.

TABLE S2. BACTERIAL, PHYSICAL, AND CHEMICAL PROPERTIES OF CONTROL LOOP EFFLUENT AND/OR INFLUENT WATER IN THE GROUND WATER STUDY (ARTESIAN WELL WATER)

| Date | Standard plate counts/ml SPC 1 48 hr | Endotoxin (ng/ml) | Free chlorine[1] (µg/ml) | Free chlorine[2] (µg/ml) | Total organic halide (TOX)[3] (µg/liter) NPCAOX | TOX |
|---|---|---|---|---|---|---|
| 6-2-80 | 3,100 | 4.9 | NA | 0 | 5 | 94.2 |
| 6-3-80 | NA | NA | NA | 0 | 2 | 20.4 |
| 6-4-89 | -- | 2.5 | 0 | NA | NA | NA |
| 6-5-80 | NA | NA | NA | 0 | 4 | 66.9 |
| 6-9-80 | 570 | 3.6 | 0 | 0 | 2 | 13.8 |
| 6-10-80 | 14 | 3.4 | 0 | 0 | NA | NA |
| 6-11-80 | 2,100 | 3.9 | 0 | NA | NA | NA |
| 6-16-80 | 2,500 | 2.0 | 0 | NA | NA | NA |
| 6-18-80 | -- | 0.8 | 0 | NA | NA | NA |
| 6-18-80[a] | 1,800 | 1.6 | 0 | NA | NA | NA |
| 6-20-80[a] | 610 | 2.6 | 0 | NA | NA | NA |
| 6-24-80 | 320 | 2.1 | 0 | NA | NA | NA |
| 6-26-80[a] | 280 | 3.8 | 0 | NA | NA | NA |
| 6-30-80 | 160 | 3.6 | 0 | NA | NA | NA |
| 6-30-80[c] | 170 | 3.6 | NA | 0 | NA | NA |
| 7-2-80[a] | 0 | 2.5 | 0 | NA | NA | NA |
| 7-5-80 | 90 | 8.5 | 0 | NA | NA | NA |
| 7-5-80[b] | 110 | 1.6 | 0 | NA | NA | NA |
| 7-6-80 | 180 | 0.8 | 0 | NA | NA | NA |
| 7-7-80 | -- | 0.8 | 0 | NA | NA | NA |
| 7-7-80[c] | 150 | 0.6 | NA | 0 | NA | NA |
| 7-8-80[a] | 2,700 | 0.4 | 0 | NA | NA | NA |
| 7-9-80 | 4,100 | 1.0 | 0 | NA | NA | NA |

a = 2 day stagnation sample
b = 5 day stagnation sample
c = running water sample
d = estimated standard plate count/ml

1 = measured after water has stagnated in plumbing overnight
2 = measured on afternoon running water samples
3 = total organic halide (TOX) = purgeable organic halide (POX) + nonpurgeable carbon adsorbable organic halide (NPCAOX)
4 = NA = not applicable

TABLE S 2 (continued).

| Date | Standard plate counts/ml SPC 1 | 48 hr | Endotoxin (ng/ml) | Free chlorine[1] (µg/ml) | Free chlorine[2] (µg/ml) | Total organic halide (TOX)[3] (µg/liter) NPCAOX | TOX |
|---|---|---|---|---|---|---|---|
| 7-10-80 | 340 | | 1.0 | 0 | NA | NA | NA |
| 7-11-80 | 190 | | 18 | 0 | NA | NA | NA |
| 7-11-80[a] | 510 | | 12.5 | 0 | NA | NA | NA |
| 7-11-80[b] | 330 | | 7.0 | 0 | NA | NA | NA |
| 7-15-80 | 110 | | 1.9 | 0 | 0 | 2 | 132 |
| 7-16-80 | 30 | | 2.9 | 0 | NA | NA | NA |
| 7-17-80[a] | 10 | | 20 | 0 | NA | NA | NA |
| 7-18-80[a] | 340 | | 1.5 | 0 | NA | NA | NA |
| 7-21-80 | 14,000 | | 3.3 | 0 | NA | NA | NA |
| 7-21-80[b] | 230 | | 8.8 | 0 | NA | NA | NA |
| 7-21-80[c] | 440 | | 2.4 | NA | 0 | NA | NA |
| 7-22-80 | 220 | | 20 | 0 | NA | NA | NA |
| 7-24-80 | 40 | | 0.7 | 0 | NA | NA | NA |
| 7-25-80 | 520 | | 0.5 | 0 | NA | NA | NA |
| 7-26-80 | | | 1.0 | 0 | NA | NA | NA |
| 7-26-80[b] | 310 | | 1.3 | 0 | NA | NA | NA |
| 7-28-80[a] | 140 | | -- | 0 | NA | NA | NA |
| 7-30-80[b] | 150 | | 0.7 | 0 | NA | NA | NA |
| 7-31-80 | 230 | | 1.7 | 0 | NA | NA | NA |
| 8-5-80[b] | 240 | | 2.1 | 0 | NA | NA | NA |

a = 2 day stagnation sample
b = 5 day stagnation sample
c = running water sample
d = estimated standard plate count/ml

1 = measured after water has stagnated in plumbing overnight
2 = measured on afternoon running water samples
3 = total organic halide (TOX) = purgeable organic halide (POX) + nonpurgeable carbon adsorbable organic halide (NPCAOX)
4 = NA = not applicable

TABLE S3. CHALLENGE WATER QUALITY FOR THE GROUND WATER SOURCE AND FOR NEW ORLEANS TAP WATER

| Constituent | Ground Water Source | | New Orleans Surface Water | | Method of Analysis |
|---|---|---|---|---|---|
| Constituent | Sample concentration (before study) | Sample concentration (after study) | Sample concentration (before study) | Sample concentration (after study) | Method of Analysis (detection limit) |
| | | | PRIMARY DRINKING WATER REGULATION CONSTITUENTS | | |
| Arsenic | ND | ND | ND | ND | FAAS (5 µg/1) |
| Barium | ND | ND | ND | ND | FAAS (42 µg/1) |
| Cadmium | ND | ND | ND | ND | FAAS (5 µg/1) |
| Chromium | ND | ND | ND | ND | FAAS (5 µg/1) |
| Lead | ND | ND | ND | ND | FAAS (5 µg/1) |
| Mercury | ND | ND | ND | ND | FAAS (0.2 µg/1) |
| Selenium | ND | ND | ND | ND | FAAS (5 µg/1) |
| Silver | ND | ND | ND | ND | FAAS (1 µg/1) |
| Nitrate (ASN) | -- | -- | 1.1 | 0.8 | cadmium reduction |
| Fluoride | -- | -- | 1.1 | 1.0 | specificion electrode |
| Endrin | ND | ND | ND | ND | EC-GC (0.002 µg/1) |
| Lindane | ND | ND | ND | ND | EC-GC (0.002 µg/1) |
| Methorychlor | ND | ND | ND | ND | EC-GC (0.002 µg/1) |
| Toxaphene | ND | ND | ND | ND | EC-GC (0.1 µg/1) |
| 2,4-D | ND | ND | ND | ND | EC-GC (0.03 µg/1) |
| 2,4,5-TP Silvex | ND | ND | ND | ND | EC-GC (0.02 µg/1) |
| | | | PROPOSED SECONDARY DRINKING WATER REGULATION CONSTITUENTS | | |
| Chloride | -- | -- | 28 | 33 | argentometric |
| Color | -- | -- | -- | -- | ------ |
| Copper | ND | ND | ND | ND | FAAS (10 µg/1) |
| Corrosivity | -- | -- | -- | -- | ------ |
| Foaming Agents | -- | -- | -- | -- | ------ |
| Hydrogen Sulfide | ND | ND | ND | ND | antimony test |
| Iron | ND | ND | ND | ND | FAAS (30 µg/1) |
| Manganese | ND | ND | ND | ND | FAAS (15 µg/1) |
| Odor | -- | -- | -- | -- | ------ |
| pH | 7.8 | 7.0 | 9.4 | 9.6 | pH meter |
| Sulfate | -- | -- | 50 | 58 | turbidometric |
| TDS | 197 | 197 | 255 | 291 | conductivity |
| Zinc | ND | ND | ND | ND | FAAS (2 µg/1) |

(continued)

TABLE S3.(continued)

| Constituent | Ground Water Source | | New Orleans Surface Water | | Method of Analysis (detection limit) |
|---|---|---|---|---|---|
| | Sample concentration (before study) | Sample concentration (after study) | Sample concentration (before study) | Sample concentration (after study) | |
| | | | ADDITIONAL PESTICIDE CONSTITUENTS | | |
| Heptachlor | ND | ND | ND | ND | EC-GC (0.002 µg/1) |
| Aldrin | ND | ND | ND | ND | EC-GC (0.002 µg/1) |
| Heptachlor Epoxide | ND | ND | ND | ND | EC-GC (0.003 µg/1) |
| DDD | ND | ND | ND | ND | EC-GC (0.001 µg/1) |
| DDE | ND | ND | ND | ND | EC-GC (0.001 µg/1) |
| DDT | ND | ND | ND | ND | EC-GC (0.003 µg/1) |
| Dieldrin | ND | ND | ND | ND | EC-GC (0.002 µg/1) |

ND - Not detected
FAAS - Flameless atomic absorption spectrometry
EC-GC - Electron capture gas chromatography

TABLE S4. ORGANIC CHEMICAL DATA

Unit: Aqualux, Model CB-2, Run Number 3KL1
Spiked Well Water Test at 0.80 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 16 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-9-80 | 579 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 6-16-80 | 1053 | NA | NA | NA | NA | * | 0.5 | * | * | NA | NA | NA | 0.5 | 99 |
| | | NA | NA | NA | NA | (40) | (13.6) | (31.9) | (31.6) | NA | NA | NA | (117) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 6-24-80 | 1503 | NA | NA | NA | NA | * | 0.7 | * | * | NA | NA | NA | 0.7 | 99 |
| | | NA | NA | NA | NA | (26.1) | (9.7) | (29.5) | (25.0) | NA | NA | NA | (90.3) | |
| % reduction | | | | | | 99 | 93 | 99 | 99 | | | | | |
| 6-30-80 | 1961 | NA | NA | NA | NA | * | 0.5 | * | * | NA | NA | NA | 0.5 | 99 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 99 | 97 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (128) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S5. ORGANIC CHEMICAL DATA

Unit: Aqualux, Model CB-2, Run Number 3KL2
Spiked Well Water Test at 0.80 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-2-80 | 16 | NA | NA | NA | NA | * | 0.8 | * | * | NA | NA | NA | 0.8 | 99 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 95 | 99 | 99 | | | | | |
| 6-9-80 | 506 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 6-18-80 | 990 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (40.0) | (14.4) | (35.7) | (29.1) | NA | NA | NA | (119) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 6-30-80 | 1778 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 7-6-80 | 2249 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (59.4) | (22.8) | (60.9) | (29.9) | NA | NA | NA | (173) | |
| % reduction | | | | | | 99 | 97 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (137) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S6. ORGANIC CHEMICAL DATA

Unit: Aquacell Bacteriostatic, Run Number JWW1
Spiked Well Water Test at 0.85 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-2-80 | 26 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (55) | (47) | (26) | (36) | NA | NA | NA | (164) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-9-80 | 565 | NA | NA | NA | NA | 0.7 | * | * | * | NA | NA | NA | 0.7 | 99 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-16-80 | 1024 | NA | NA | NA | NA | 1.1 | * | * | * | NA | NA | NA | 1.1 | 99 |
| | | NA | NA | NA | NA | (40) | (13.6) | (31.9) | (31.6) | NA | NA | NA | (117) | |
| % reduction | | | | | | 97 | 99 | 99 | 99 | | | | | |
| 6-25-80 | 1517 | NA | NA | NA | NA | 1.9 | * | * | * | NA | NA | NA | 1.9 | 98 |
| | | NA | NA | NA | NA | (33.7) | (12.6) | (38.0) | (34.5) | NA | NA | NA | (119) | |
| % reduction | | | | | | 94 | 99 | 99 | 99 | | | | | |
| 6-30-80 | 1872 | NA | NA | NA | NA | 2.6 | 0.5 | * | * | NA | NA | NA | 3.1 | 98 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 95 | 97 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (128) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S7. ORGANIC CHEMICAL DATA

Unit: Aquacell Bacteriostatic, Run Number 3WW2
Spiked Well Water Test at 0.85 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-2-80 | 26 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-9-80 | 458 | NA | NA | NA | NA | 0.7 | * | * | * | NA | NA | NA | 0.7 | 99 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-18-80 | 939 | NA | NA | NA | NA | 2.5 | 1.1 | 2.7 | 1.9 | NA | NA | NA | 8.2 | 93 |
| | | NA | NA | NA | NA | (40) | (14.4) | (35.7) | (29.1) | NA | NA | NA | (119) | |
| % reduction | | | | | | 94 | 92 | 92 | 93 | | | | | |
| 6-30-80 | 1629 | NA | NA | NA | NA | 1.8 | * | * | * | NA | NA | NA | 1.8 | 99 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 96 | 99 | 99 | 99 | | | | | |
| 7-6-80 | 2036 | NA | NA | NA | NA | 5.1 | 1.5 | 2.6 | 1.9 | NA | NA | NA | 11.1 | 94 |
| | | NA | NA | NA | NA | (59.4) | (22.8) | (60.9) | (29.9) | NA | NA | NA | (173) | |
| % reduction | | | | | | 91 | 93 | 96 | 94 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (137) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S8 . ORGANIC CHEMICAL DATA

Unit: Continental, Model 350, Run Number 31J1
Spiked Well Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 7-21-80 | 5 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-24-80 | 265 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (43.9) | (14.3) | (43.8) | (36.7) | NA | NA | NA | (139) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-26-80 | 446 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (47.6) | (18) | (58.3) | (45) | NA | NA | NA | (169) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-30-80 | 627 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (20) | (5.9) | (28.2) | (16.7) | NA | NA | NA | (70.8) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-31-80 | 719 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (26.4) | (8.7) | (36.2) | (22.3) | NA | NA | NA | (93.6) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (134) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S 9 . ORGANIC CHEMICAL DATA

Unit: Continental, Model 350, Run Number 3IJ2
Spiked Well Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 7-21-80 | 5 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-24-80 | 353 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (43.9) | (14.3) | (43.8) | (36.7) | NA | NA | NA | (139) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-26-80 | 526 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (47.6) | (18) | (58.3) | (45) | NA | NA | NA | (169) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-30-80 | 682 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (20) | (5.9) | (28.2) | (16.7) | NA | NA | NA | (70.8) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-31-80 | 770 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (26.4) | (8.7) | (36.2) | (22.3) | NA | NA | NA | (93.6) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (134) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S10. ORGANIC CHEMICAL DATA

Unit: Culligan, Model SG-2, Run Number 3-CD-1
Spiked Well Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 15 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-16-80 | 1227 | NA | NA | NA | NA | 0.7 | * | * | * | NA | NA | NA | 0.7 | 99 |
| | | NA | NA | NA | NA | (40) | (13.6) | (31.9) | (31.6) | NA | NA | NA | (117) | |
| % reduction | | | | | | 98 | 99 | 99 | 99 | | | | | |
| 6-24-80 | 1994 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (26.1) | (9.7) | (29.5) | (25.0) | NA | NA | NA | (90.3) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-7-80 | 3163 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (58.2) | (21.9) | (60.8) | (31.2) | NA | NA | NA | (172) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-16-80 | 4199 | NA | NA | NA | NA | * | 0.6 | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (46.2) | (42.1) | NA | NA | NA | (145) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (144) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S11. ORGANIC CHEMICAL DATA

Unit: Culligan, Model SG-2, Run Number 3C02
Spiked Well Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 15 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-16-80 | 1096 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | |
| | | NA | NA | NA | NA | (24.8) | (7.7) | (32.0) | (21.7) | NA | NA | NA | (86.2) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 6-24-80 | 1852 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | |
| | | NA | NA | NA | NA | (26.1) | (9.7) | (29.5) | (25.0) | NA | NA | NA | (90.3) | 99 |
| % reduction | | | | | | 98 | 99 | 99 | 99 | | | | | |
| 7-7-80 | 2884 | NA | NA | NA | NA | 0.8 | * | * | * | NA | NA | NA | 0.8 | |
| | | NA | NA | NA | NA | (58.2) | (21.9) | (60.8) | (31.2) | NA | NA | NA | (172) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-21-80 | 4218 | NA | NA | NA | NA | 0.7 | * | * | * | NA | NA | NA | 0.7 | |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (144) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S12. ORGANIC CHEMICAL DATA

Unit: Everpure, Model QC4-THM, Run Number 3GG1
Spiked Well Water Test at 0.60 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 7-1-80 | 10 | NA | NA | NA | NA | 0.8 | 0.7 | * | * | NA | NA | NA | 1.5 | |
| | | NA | NA | NA | NA | (49.3) | (17.6) | (51.6) | (38.4) | NA | NA | NA | (157) | 99 |
| % reduction | | | | | | 98 | 96 | 99 | 99 | | | | | |
| 7-5-80 | 252 | NA | NA | NA | NA | * | 0.5 | * | * | NA | NA | NA | 0.5 | |
| | | NA | NA | NA | NA | (50) | (15) | (55.7) | (41.5) | NA | NA | NA | (165) | 99 |
| % reduction | | | | | | 99 | 97 | 99 | 99 | | | | | |
| 7-9-80 | 488 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | |
| | | NA | NA | NA | NA | (48.5) | (19.1) | (46.8) | (33.7) | NA | NA | NA | (148) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-16-80 | 709 | NA | NA | NA | NA | * | 0.8 | * | * | NA | NA | NA | 0.8 | |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (145) | 99 |
| % reduction | | | | | | 99 | 95 | 99 | 99 | | | | | |
| 7-21-80 | 808 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | 99 |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (158) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S13. ORGANIC CHEMICAL DATA

Unit: Everpure, Model QC4-THM, Run Number 3GG2
Spiked Well Water Test at 0.60 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7-1-80 | 9 | NA | NA | NA | NA | 0.5 | 1.1 | * | * | NA | NA | NA | 1.6 | 99 |
| | | NA | NA | NA | NA | (49.3) | (17.6) | (51.6) | (38.4) | NA | NA | NA | (157) | |
| % reduction | | | | | | 99 | 94 | 99 | 99 | | | | | |
| 7-5-80 | 275 | NA | NA | NA | NA | * | * | * | * | NA | NA | NA | * | 99 |
| | | NA | NA | NA | NA | (50) | (18) | (55.7) | (41.5) | NA | NA | NA | (165) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-9-80 | 528 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (48.5) | (19.1) | (46.8) | (53.7) | NA | NA | NA | (148) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| 7-16-80 | 774 | NA | NA | NA | NA | * | 0.7 | * | * | NA | NA | NA | 0.7 | 99 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (145) | |
| % reduction | | | | | | 99 | 96 | 99 | 99 | | | | | |
| 7-21-80 | 899 | NA | NA | NA | NA | 0.6 | * | * | * | NA | NA | NA | 0.6 | 99 |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | |
| % reduction | | | | | | 99 | 99 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (158) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S14. ORGANIC CHEMICAL DATA

Unit: Seagull IV, Run Number 3XX1
Spiked Well Water Test at 0.80 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 7-1-80 | 22 | NA | NA | NA | NA | 1.4 | 0.5 | 1.5 | 1.1 | NA | NA | NA | 4.5 | 97 |
| | | NA | NA | NA | NA | (49.3) | (17.6) | (51.6) | (38.4) | NA | NA | NA | (157) | |
| % reduction | | | | | | 97 | 97 | 97 | 97 | | | | | |
| 7-5-80 | 419 | NA | NA | NA | NA | 1.2 | 0.5 | 1.4 | 1.1 | NA | NA | NA | 4.2 | 97 |
| | | NA | NA | NA | NA | (50) | (18) | (55.7) | (41.5) | NA | NA | NA | (165) | |
| % reduction | | | | | | 98 | 97 | 97 | 97 | | | | | |
| 7-9-80 | 812 | NA | NA | NA | NA | 0.8 | * | * | * | NA | NA | NA | 0.8 | 99 |
| | | NA | NA | NA | NA | (48.5) | (19.1) | (46.8) | (33.7) | NA | NA | NA | (148) | |
| % reduction | | | | | | 98 | 99 | 99 | 99 | | | | | |
| 7-16-80 | 1275 | NA | NA | NA | NA | 1.4 | 0.5 | 1.5 | 1.1 | NA | NA | NA | 4.5 | 97 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (145) | |
| % reduction | | | | | | 96 | 97 | 97 | 97 | | | | | |
| 7-21-80 | 1712 | NA | NA | NA | NA | 2.9 | 0.5 | 1.5 | 1.1 | NA | NA | NA | 6.0 | 96 |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | |
| % reduction | | | | | | 94 | 97 | 97 | 97 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (158) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S15. ORGANIC CHEMICAL DATA

Unit: Seagull IV, Run Number 3XX2
Spiked Well Water Test at 0.80 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7-1-80 | 26 | NA | NA | NA | NA | 1.2 | 0.5 | 1.7 | 1.1 | NA | NA | NA | 4.5 | 97 |
| | | NA | NA | NA | NA | (49.3) | (17.6) | (51.6) | (38.4) | NA | NA | NA | (157) | |
| % reduction | | | | | | 98 | 97 | 97 | 97 | | | | | |
| 7-5-80 | 348 | NA | NA | NA | NA | 1.2 | 0.5 | 1.4 | 1.1 | NA | NA | NA | 4.2 | 97 |
| | | NA | NA | NA | NA | (50) | (18) | (55.7) | (41.5) | NA | NA | NA | (165) | |
| % reduction | | | | | | 98 | 97 | 97 | 97 | | | | | |
| 7-9-80 | 666 | NA | NA | NA | NA | 1.3 | 0.5 | 1.5 | 1.1 | NA | NA | NA | 4.4 | 97 |
| | | NA | NA | NA | NA | (48.5) | (19.1) | (46.8) | (33.7) | NA | NA | NA | (148) | |
| % reduction | | | | | | 97 | 97 | 97 | 97 | | | | | |
| 7-16-80 | 1049 | NA | NA | NA | NA | 1.1 | 0.4 | 1.3 | 0.9 | NA | NA | NA | 3.7 | 97 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (145) | |
| % reduction | | | | | | 97 | 97 | 97 | 98 | | | | | |
| 7-21-80 | 1428 | NA | NA | NA | NA | 2.1 | 0.5 | 1.3 | 1.1 | NA | NA | NA | 5.0 | 97 |
| | | NA | NA | NA | NA | (46.8) | (15.4) | (46.3) | (38.3) | NA | NA | NA | (147) | |
| % reduction | | | | | | 96 | 97 | 97 | 97 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (158) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S16. ORGANIC CHEMICAL DATA

Unit: Hurley Town and Country, Run Number 3HH1
Spiked Well Water Test at 0.78 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 8 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | *<br>(52.3) | 1.0<br>(15) | *<br>(28.7) | *<br>(42.4) | NA<br>NA | NA<br>NA | NA<br>NA | 1.0<br>(138) | 99 |
| % reduction | | | | | | 99 | 93 | 99 | 99 | | | | | |
| 6-18-80 | 1088 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | *<br>(40.0) | 3.4<br>(14.4) | *<br>(35.7) | *<br>(29.1) | NA<br>NA | NA<br>NA | NA<br>NA | 3.4<br>(119) | 97 |
| % reduction | | | | | | 99 | 76 | 99 | 99 | | | | | |
| 6-30-80 | 2092 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 1.4<br>(48.6) | *<br>(17.1) | *<br>(47.6) | *<br>(35.3) | NA<br>NA | NA<br>NA | NA<br>NA | 1.4<br>(149) | 99 |
| % reduction | | | | | | 97 | 99 | 99 | 99 | | | | | |
| 7-15-80 | 3184 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 4.2<br>(56.9) | 1.4<br>(18.8) | 1.1<br>(52.6) | 0.6<br>(37.8) | NA<br>NA | NA<br>NA | NA<br>NA | 7.3<br>(166) | 96 |
| % reduction | | | | | | 93 | 93 | 98 | 98 | | | | | |
| 7-25-80 | 4023 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 3.1<br>(38.5) | 0.9<br>(14.2) | *<br>(49.7) | *<br>(35.6) | NA<br>NA | NA<br>NA | NA<br>NA | 4.0<br>(138) | 97 |
| % reduction | | | | | | 92 | 94 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (143) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S17. ORGANIC CHEMICAL DATA

Unit: Hurley Town and Country, Run Number 3HH2
Spiked Well Water Test at 0.78 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 8 | NA | NA | NA | NA | 0.5 | 0.5 | * | * | NA | NA | NA | 1.0 | 99 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 97 | 99 | 99 | | | | | |
| 6-18-80 | 1079 | NA | NA | NA | NA | 0.9 | 0.5 | * | * | NA | NA | NA | 1.4 | 99 |
| | | NA | NA | NA | NA | (40) | (14.4) | (35.7) | (29.1) | NA | NA | NA | (119) | |
| % reduction | | | | | | 98 | 97 | 99 | 99 | | | | | |
| 6-30-80 | 2102 | NA | NA | NA | NA | 1.4 | 0.6 | * | * | NA | NA | NA | 2.0 | 99 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 97 | 96 | 99 | 99 | | | | | |
| 7-15-80 | 3188 | NA | NA | NA | NA | 3.1 | 0.9 | 0.9 | 0.5 | NA | NA | NA | 5.4 | 97 |
| | | NA | NA | NA | NA | (56.9) | (18.8) | (52.6) | (37.8) | NA | NA | NA | (166) | |
| % reduction | | | | | | 95 | 95 | 98 | 99 | | | | | |
| 7-25-80 | 4021 | NA | NA | NA | NA | 2.3 | 0.5 | * | * | NA | NA | NA | 2.8 | 98 |
| | | NA | NA | NA | NA | (38.5) | (14.2) | (49.7) | (35.6) | NA | NA | NA | (138) | |
| percent reduction | | | | | | 94 | 96 | 99 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (143) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE SI8. ORGANIC CHEMICAL DATA

Unit: Water Washer, Model 1000, Run Number 3KK1
Spiked Well Water Test at 0.46 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 5 | NA | NA | NA | NA | 1.4 | 1.4 | 0.9 | 0.6 | NA | NA | NA | 4.3 | 97 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 97 | 91 | 97 | 99 | | | | | |
| 6-9-80 | 288 | NA | NA | NA | NA | 0.5 | 1.5 | * | * | NA | NA | NA | 2.0 | 99 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 99 | 90 | 99 | 99 | | | | | |
| 6-16-80 | 495 | NA | NA | NA | NA | 8.0 | 2.9 | 2.4 | 1.0 | NA | NA | NA | 14.4 | 88 |
| | | NA | NA | NA | NA | (40) | (13.6) | (31.9) | (31.6) | NA | NA | NA | (117) | |
| % reduction | | | | | | 80 | 79 | 92 | 97 | | | | | |
| 6-24-80 | 754 | NA | NA | NA | NA | 19.4 | 6.8 | 3.1 | 9.6 | NA | NA | NA | 38.9 | 40 |
| | | NA | NA | NA | NA | (26.1) | (9.7) | (29.5) | (25.0) | NA | NA | NA | (90.3) | |
| % reduction | | | | | | 26 | 30 | 89 | 61 | | | | | |
| 6-30-80 | 1014 | NA | NA | NA | NA | 26.1 | 6.7 | 14 | 13.6 | NA | NA | NA | 60.4 | 41 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 46 | 61 | 71 | 61 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (128) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S19. ORGANIC CHEMICAL DATA

Unit: Water Washer, Model 1000, Run Number 3KK2
Spiked Well Water Test at 0.46 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-2-80 | 5 | NA | NA | NA | NA | 2.7 | 0.6 | 2.0 | 0.6 | NA | NA | NA | 5.9 | 96 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 95 | 96 | 93 | 99 | | | | | |
| 6-10-80 | 307 | NA | NA | NA | NA | 4.3 | 0.9 | 2.2 | 0.6 | NA | NA | NA | 8.0 | 94 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 92 | 94 | 92 | 99 | | | | | |
| 6-16-80 | 480 | NA | NA | NA | NA | 9.5 | 6.4 | 8.8 | 7.4 | NA | NA | NA | 32.1 | 73 |
| | | NA | NA | NA | NA | (40) | (13.6) | (31.9) | (31.6) | NA | NA | NA | (117) | |
| % reduction | | | | | | 76 | 53 | 72 | 77 | | | | | |
| 6-24-80 | 730 | NA | NA | NA | NA | 19.2 | 6.8 | 12.6 | 9.6 | NA | NA | NA | 48.2 | 53 |
| | | NA | NA | NA | NA | (26.1) | (9.7) | (29.5) | (25.0) | NA | NA | NA | (90.3) | |
| % reduction | | | | | | 26 | 30 | 57 | 62 | | | | | |
| 6-30-80 | 985 | NA | NA | NA | NA | 24.3 | 7.1 | 14.8 | 13.5 | NA | NA | NA | 59.7 | 40 |
| | | NA | NA | NA | NA | (48.6) | (17.1) | (47.6) | (35.3) | NA | NA | NA | (149) | |
| % reduction | | | | | | 50 | 58 | 69 | 62 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (128) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S20. ORGANIC CHEMICAL DATA

Unit: Filbrook Pour-Through, Run Number 3SS1
Spiked Well Water Test at 0.02 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) | | | | | | | | | | | | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | |
| 6-2-80 | 1 | NA | NA | NA | NA | 1.3 | 0.5 | 1.4 | * | NA | NA | NA | 3.2 | 98 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 98 | 97 | 95 | 99 | | | | | |
| 6-11-80 | 103 | NA | NA | NA | NA | 3.2 | 1.5 | 1.6 | * | NA | NA | NA | 6.3 | 96 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 94 | 90 | 94 | 99 | | | | | |
| 7-6-80 | 273 | NA | NA | NA | NA | 16.6 | 4.2 | 2.0 | 0.9 | NA | NA | NA | 23.7 | 86 |
| | | NA | NA | NA | NA | (59.4) | (22.8) | (60.9) | (29.9) | NA | NA | NA | (173) | |
| % reduction | | | | | | 72 | 82 | 97 | 97 | | | | | |
| 7-16-80 | 376 | NA | NA | NA | NA | 10.5 | 1.3 | 2.5 | 1.6 | NA | NA | NA | 15.9 | 89 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (146) | |
| % reduction | | | | | | 73 | 92 | 95 | 96 | | | | | |
| 7-25-80 | 484 | NA | NA | NA | NA | 11.5 | 3.2 | 2.1 | 0.5 | NA | NA | NA | 17.3 | 88 |
| | | NA | NA | NA | NA | (38.5) | (14.2) | (49.7) | (35.6) | NA | NA | NA | (138) | |
| % reduction | | | | | | 70 | 77 | 96 | 99 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (143) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S21. ORGANIC CHEMICAL DATA

Unit: Filbrook Pour-Through, Run Number 3SS2
Spiked Well Water Test at 0.02 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-2-80 | 1 | NA | NA | NA | NA | 0.7 | * | 1.6 | 0.6 | NA | NA | NA | 2.9 | 98 |
| | | NA | NA | NA | NA | (52.3) | (15) | (28.7) | (42.4) | NA | NA | NA | (138) | |
| % reduction | | | | | | 99 | 99 | 94 | 99 | | | | | |
| 6-11-80 | 102 | NA | NA | NA | NA | 4.1 | 1.5 | 1.7 | * | NA | NA | NA | 7.3 | 95 |
| | | NA | NA | NA | NA | (53.4) | (15.7) | (28.7) | (41.8) | NA | NA | NA | (140) | |
| % reduction | | | | | | 92 | 90 | 94 | 99 | | | | | |
| 7-6-80 | 269 | NA | NA | NA | NA | 12.0 | 2.6 | 2.1 | 0.7 | NA | NA | NA | 17.4 | 90 |
| | | NA | NA | NA | NA | (59.4) | (22.8) | (60.9) | (29.9) | NA | NA | NA | (173) | |
| % reduction | | | | | | 80 | 86 | 97 | 98 | | | | | |
| 7-16-80 | 373 | NA | NA | NA | NA | 10.6 | 1.3 | 3.8 | 2.4 | NA | NA | NA | 18.1 | 88 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (146) | |
| % reduction | | | | | | 73 | 92 | 92 | 94 | | | | | |
| 7-25-80 | 489 | NA | NA | NA | NA | 11.2 | 3.3 | 3.2 | 0.8 | NA | NA | NA | 18.5 | 87 |
| | | NA | NA | NA | NA | (38.5) | (14.2) | (49.7) | (35.6) | NA | NA | NA | (138) | |
| % reduction | | | | | | 71 | 77 | 94 | 98 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (143) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S22. ORGANIC CHEMICAL DATA

Unit: Sears Taste and Odor, Run Number 3CC1
Spiked Well Water Test at 2.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7-6-80 | 20 | NA | NA | NA | NA | 1.2 | * | * | * | NA | NA | NA | 1.2 | 99 |
| | | NA | NA | NA | NA | (59.4) | (22.8) | (60.9) | (29.9) | NA | NA | NA | (173) | |
| % reduction | | | | | | 98 | 99 | 99 | 99 | | | | | |
| 7-11-80 | 800 | NA | NA | NA | NA | 8.8 | 2.9 | 0.9 | 0.9 | NA | NA | NA | 13.5 | 90 |
| | | NA | NA | NA | NA | (43.4) | (15.1) | (45.1) | (34.9) | NA | NA | NA | (139) | |
| % reduction | | | | | | 80 | 81 | 98 | 97 | | | | | |
| 7-16-80 | 1622 | NA | NA | NA | NA | 9.7 | 2.6 | 1.1 | * | NA | NA | NA | 13.4 | 91 |
| | | NA | NA | NA | NA | (39.3) | (15.8) | (48.2) | (42.1) | NA | NA | NA | (145) | |
| % reduction | | | | | | 75 | 84 | 98 | 99 | | | | | |
| 7-22-80 | 2282 | NA | NA | NA | NA | 10.7 | 3.0 | 1.3 | 0.6 | NA | NA | NA | 15.6 | 89 |
| | | NA | NA | NA | NA | (45.9) | (14.9) | (45.1) | (39.0) | NA | NA | NA | (145) | |
| % reduction | | | | | | 77 | 80 | 97 | 98 | | | | | |
| 7-25-80 | 2774 | NA | NA | NA | NA | 12.7 | 3.3 | 1.8 | 0.8 | NA | NA | NA | 18.6 | 86 |
| | | NA | NA | NA | NA | (38.5) | (14.2) | (49.7) | (35.6) | NA | NA | NA | (138) | |
| % reduction | | | | | | 64 | 77 | 64 | 98 | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (152) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_2C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S23. ORGANIC CHEMICAL DATA

Unit: Sears Taste and Odor, Run Number 3CC2
Spiked Well Water Test at 2.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) halogenated organics (ppb) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | total | Percent reduction halogenated organics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7-6-80 | 20 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 2.0<br>(59.4)<br>97 | 0.6<br>(22.8)<br>97 | 1.1<br>(60.9)<br>98 | 0.6<br>(29.9)<br>98 | NA<br>NA | NA<br>NA | NA<br>NA | 4.3<br>(173) | 98 |
| % reduction | | | | | | | | | | | | | | |
| 7-10-80 | 820 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 6.0<br>(57.5)<br>90 | 1.6<br>(20.7)<br>92 | 1.4<br>(51.0)<br>97 | 0.7<br>(35.5)<br>98 | NA<br>NA | NA<br>NA | NA<br>NA | 9.7<br>(165) | 94 |
| % reduction | | | | | | | | | | | | | | |
| 7-15-80 | 1785 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 14.0<br>(56.9)<br>75 | 4.0<br>(18.8)<br>79 | 2.4<br>(52.6)<br>95 | 2.0<br>(37.8)<br>95 | NA<br>NA | NA<br>NA | NA<br>NA | 22.4<br>(166) | 86 |
| % reduction | | | | | | | | | | | | | | |
| 7-22-80 | 2760 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 12.7<br>(45.9)<br>72 | 3.3<br>(14.9)<br>78 | 1.8<br>(45.1)<br>96 | 0.8<br>(39.0)<br>98 | NA<br>NA | NA<br>NA | NA<br>NA | 18.6<br>(145) | 87 |
| % reduction | | | | | | | | | | | | | | |
| 7-25-80 | 3349 | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | 10.0<br>(38.5)<br>74 | 2.7<br>(14.2)<br>81 | 1.8<br>(49.7)<br>96 | 0.6<br>(35.6)<br>98 | NA<br>NA | NA<br>NA | NA<br>NA | 15.1<br>(138) | 89 |
| % reduction | | | | | | | | | | | | | | |
| Average halogenated organics influent level during test period | | | | | | | | | | | | | (152) | |

*Halogenated organics concentration <0.5 ppb.
NA not applicable.

1 = Chloroform ($CHCl_3$)
2 = Dichlorobromomethane ($CHCl_2Br$)
3 = Chlorodibromomethane ($CHClBr_2$)
4 = Bromoform ($CHBr_3$)
5 = 1,1,1-Trichloroethane ($Cl_3C:CH_3$)
6 = Carbon Tetrachloride ($CCl_4$)
7 = Trichloroethylene ($Cl_2C:CHCl$)
8 = Tetrachloroethylene ($Cl_2C:CCl_2$)
9 = p-Dichlorobenzene ($C_6H_4Cl_2$)
10 = Hexachlorobenzene ($C_6Cl_6$)
11 = Chlodane (Technical grade, 60%)

TABLE S24. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Miami Field Study - Unit 1
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 13 | 9 | * | 3 | 3 | * | 15 | 94 | 3010 | 57 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-9-79 | 1070 | 80 | * | 31 | 16 | 2 | 129 | 48 | 5344 | 22 |
| | | (121) | (*) | (69) | (47) | (10) | (247) | | (6832) | |
| 2-15-79 | 1482 | 88 | * | 37 | 20 | 4 | 149 | 42 | 6372 | 9 |
| | | (128) | (*) | (70) | (47) | (10) | (255) | | (6995) | |
| 2-16-79 | 1534 | 89 | * | 33 | 16 | 2 | 140 | 39 | 5494 | 15 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| 2-20-79 | 1790 | -- | -- | -- | -- | -- | -- | -- | 6507 | 13 |
| | | (142) | (*) | (79) | (50) | (12) | (283) | | (7477) | |
| 2-22-79 | 2012 | 154 | 1 | 78 | 4 | 16 | 253 | 10 | 6142 | 11 |
| | | (147) | (*) | (74) | (49) | (11) | (281) | | (6900) | |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S25. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Miami Field Study - Unit 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 11 | 16 | * | 5 | 4 | * | 25 | 89 | 2142 | 70 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-9-79 | 1093 | 69 | * | 24 | 11 | 1 | 105 | 58 | 6209 | 9 |
| | | (121) | (*) | (69) | (47) | (10) | (247) | | (6832) | |
| 2-15-79 | 1505 | 78 | * | 29 | 13 | 2 | 122 | 52 | 6092 | 13 |
| | | (128) | (*) | (70) | (47) | (10) | (255) | | (6995) | |
| 2-16-79 | 1562 | 99 | * | 38 | 16 | 2 | 155 | 33 | 6201 | 4 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| 2-20-79 | 1786 | 142 | 1 | 75 | 28 | 9 | 255 | 10 | 7314 | 2 |
| | | (142) | (*) | (79) | (50) | (12) | (283) | | (7477) | |
| 2-22-79 | 2034 | 98 | * | 39 | 19 | 3 | 159 | 43 | 6640 | 4 |
| | | (147) | (*) | (74) | (49) | (11) | (281) | | (6900) | |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S26. ORGANIC CHEMICAL DATA
Unit: Everpure Model QC4-THM, Run Number Miami Field Test - Unit 1
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 14 | * | * | * | * | * | * | 99 | 818 | 88 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-9-79 | 556 | 6 | * | 1 | 2 | * | 9 | 96 | 4319 | 37 |
| | | (121) | (*) | (69) | (47) | (10) | (247) | | (6832) | |
| 2-15-79 | 795 | -- | -- | -- | -- | -- | -- | -- | 4309 | 38 |
| | | (128) | (*) | (70) | (47) | (10) | (255) | | (6995) | |
| 2-16-79 | 826 | -- | -- | -- | -- | -- | -- | -- | 4570 | 29 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| 2-20-79 | 937 | 11 | * | 2 | 2 | * | 15 | 95 | 5637 | 25 |
| | | (142) | (*) | (79) | (50) | (12) | (283) | | (7477) | |
| 2-22-79 | 1014 | 11 | * | 2 | 2 | * | 15 | 95 | 5250 | 24 |
| | | (147) | (*) | (74) | (49) | (11) | (281) | | (6900) | |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S27. ORGANIC CHEMICAL DATA
Unit: Everpure Model QC4-THM, Run Number Miami Field Test - Unit 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 16 | * | * | * | * | * | * | 99 | 528 | 93 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-9-79 | 585 | 6 | * | 1 | 1 | * | 8 | 97 | 4716 | 31 |
| | | (121) | (*) | (69) | (47) | (10) | (247) | | (6832) | |
| 2-15-79 | 855 | 8 | * | 1 | 2 | * | 11 | 96 | 4456 | 36 |
| | | (128) | (*) | (70) | (47) | (10) | (255) | | (6995) | |
| 2-16-79 | 889 | 11 | * | 2 | 2 | * | 15 | 94 | 4204 | 35 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| 2-20-79 | 1012 | 14 | * | 3 | 2 | 1 | 20 | 93 | 6371 | 15 |
| | | (142) | (*) | (79) | (50) | (12) | (283) | | (7477) | |
| 2-22-79 | 1105 | 2 | * | * | 1 | * | 3 | 99 | 5607 | 19 |
| | | (147) | (*) | (74) | (49) | (11) | (281) | | (6900) | |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S28. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1C, Run Number Miami Field Test - Unit 1
Ambient Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 5 | 58 | * | 48 | 31 | 6 | 173 | 27 | 5870 | 17 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-2-79 | 106 | 108 | * | 50 | 26 | 5 | 189 | 20 | 7706 | 0 |
| | | (116) | (*) | (65) | (45) | (10) | (236) | | (7297) | |
| 2-12-79 | 255 | 108 | * | 57 | 39 | 8 | 212 | 12 | 7193 | 4 |
| | | (116) | (*) | (68) | (46) | (10) | (240) | | (7500) | |
| 2-16-79 | 259 | 108 | * | 54 | 37 | 9 | 208 | 10 | 6414 | 1 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| Average THM and NPTOC during test period | | | | | | | (236) | | (7076) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S 29. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1C, Run Number Miami Field Test - Unit 2
Ambient Water Test at 0.9 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 8 | 71 | * | 42 | 26 | 5 | +144 | 39 | 5877 | 17 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-2-79 | 104 | 103 | * | 48 | 26 | 5 | 182 | 23 | 6588 | 10 |
| | | (116) | (*) | (65) | (45) | (10) | (236) | | (7297) | |
| 2-12-79 | 245 | 110 | * | 59 | 40 | 8 | 217 | 10 | 7541 | 0 |
| | | (116) | (*) | (68) | (46) | (10) | (240) | | (7500) | |
| 2-16-79 | 251 | -- | -- | -- | -- | -- | -- | -- | 6835 | -0 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| Average THM and NPTOC during test period | | | | | | | (236) | | (7076) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S 30. ORGANIC CHEMICAL DATA

Unit: Sears Taste and Odor, Run Number Miami Field Test - Unit 1
Ambient Water Test at 1.5 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 11 | 1<br>(116) | *<br>(*) | *<br>(66) | *<br>(45) | *<br>(10) | 1<br>(237) | 99 | 1819<br>(7054) | 74 |
| 2-9-79 | 1620 | 96<br>(121) | *<br>(*) | 38<br>(69) | 20<br>(47) | 3<br>(10) | 157<br>(247) | 36 | 5582<br>(6832) | 18 |
| 2-15-79 | 2302 | 122<br>(128) | *<br>(*) | 54<br>(70) | 28<br>(47) | 5<br>(10) | 209<br>(255) | 18 | 6087<br>(6995) | 13 |
| 2-16-79 | 2416 | 103<br>(115) | *<br>(*) | 53<br>(62) | 29<br>(44) | 5<br>(10) | 190<br>(231) | 18 | 5734<br>(6452) | 11 |
| 2-20-79 | 3067 | 150<br>(142) | *<br>(*) | 54<br>(79) | 28<br>(50) | 5<br>(12) | 237<br>(283) | 16 | 7405<br>(7477) | 1 |
| 2-22-79 | 3720 | 109<br>(147) | *<br>(*) | 53<br>(74) | 29<br>(49) | 5<br>(11) | 196<br>(281) | 30 | 6545<br>(6900) | 5 |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S 31. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Miami Field Test - Unit 2
Ambient Water Test at 1.5 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 1-28-79 | 12 | 2 | * | * | 1 | * | 3 | 99 | 1841 | 74 |
| | | (116) | (*) | (66) | (45) | (10) | (237) | | (7054) | |
| 2-9-79 | 1494 | 101 | * | 40 | 20 | 3 | 164 | 34 | 4773 | 30 |
| | | (121) | (*) | (69) | (47) | (10) | (247) | | (6832) | |
| 2-15-79 | 1658 | -- | -- | -- | -- | -- | -- | -- | 5871 | 16 |
| | | (128) | (*) | (70) | (47) | (10) | (255) | | (6995) | |
| 2-16-79 | 2582 | 98 | * | 49 | 27 | 5 | 179 | 22 | 6017 | 7 |
| | | (115) | (*) | (62) | (44) | (10) | (231) | | (6452) | |
| 2-20-79 | 3048 | 121 | * | 58 | 33 | 7 | 219 | 23 | 7546 | 0 |
| | | (142) | (*) | (79) | (50) | (12) | (283) | | (7477) | |
| 2-22-79 | 3441 | 41 | * | 22 | 16 | 3 | 82 | 71 | 6499 | 6 |
| | | (147) | (*) | (74) | (49) | (11) | (281) | | (6900) | |
| Average THM and NPTOC during test period | | | | | | | (253) | | (6962) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S32. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Atlanta Field Test - Unit 1
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | 21 | * | 6 | 3 | * | 30 | 54 | 687 | 38 |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 1045 | 35 | * | 7 | 3 | * | 45 | 31 | 1034 | 0 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 1418 | 22 | * | 4 | 2 | * | 28 | 58 | 1422 | 8 |
| | | (54) | (*) | (8) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 1606 | 23 | * | 3 | 1 | * | 27 | 41 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S 33. ORGANIC CHEMICAL DATA

Unit: Aqualux Model HB, Run Number Atlanta Field Test - Unit 2

Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | * | 2 | * | * | * | 2 | 97 | 676 | 39 |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 643 | 12 | * | 2 | 2 | * | 16 | 75 | 887 | 4 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 1738 | 23 | * | 4 | 2 | * | 29 | 56 | 1366 | 12 |
| | | (54) | (*) | (8) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 1981 | 20 | * | 3 | 1 | * | 24 | 48 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.

+Precipitation formed during analysis - invalid results.

TABLE S 34. ORGANIC CHEMICAL DATA

Unit: Everpure Model QC4-THM, Run Number Atlanta Field Test - Unit 1
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | * | * | * | * | * | * | 99 | * | -- |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 606 | * | * | * | * | * | * | 99 | 842 | 9 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 1103 | * | * | * | * | * | * | 99 | 406 | 74 |
| | | (54) | (*) | (8) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 1432 | * | * | * | * | * | * | 99 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (45) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S35. ORGANIC CHEMICAL DATA

Unit: Everpure Model QC4-THM, Run Number Atlanta Field Test - Unit 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | 5 | * | * | 1 | * | 6 | 91 | + | -- |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 555 | 3 | * | * | * | * | 3 | 95 | 348 | 62 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 856 | 5 | * | * | * | * | 5 | 92 | 409 | 74 |
| | | (54) | (*) | (8) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 1032 | 5 | * | * | * | * | 5 | 89 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S36. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1C, Run Number Atlanta Field Test - Unit 1
Ambient Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | 47 | * | 14 | 1 | * | 62 | 5 | 982 | 12 |
| | | (51) | (*) | (11) | (3) | (8) | (65) | | (1110) | |
| 3-14-79 | 128 | 54 | * | 10 | 3 | * | 67 | 0 | 922 | 0 |
| | | (52) | (8) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 199 | 58 | * | 12 | 3 | * | 73 | 0 | 1502 | 3 |
| | | (54) | (*) | (*) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 291 | 31 | * | 6 | 2 | * | 39 | 15 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | + | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S37. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1C, Run Number Atlanta Field Test - Unit 2
Ambient Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 2 | 49 | * | 8 | 3 | * | 60 | 8 | + | -- |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (110) | |
| 3-14-79 | 140 | 31 | * | 7 | 3 | * | 41 | 37 | 913 | 1 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 204 | 52 | * | 11 | 3 | * | 66 | 0 | + | -- |
| | | (54) | (*) | (8) | (4) | (*) | (66) | 0 | (1547) | |
| 3-17-79 | 239 | 31 | * | 11 | 3 | * | 45 | 2 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration <0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S38. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Atlanta Field Test - Unit 1
Ambient Water Test at 1.5 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 3 | 8 | * | * | * | * | 8 | 88 | + | -- |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 1575 | 40 | * | 10 | 2 | * | 52 | 20 | 851 | 8 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 2938 | 27 | * | 5 | 2 | * | 34 | 48 | 692 | 55 |
| | | (54) | (*) | (8) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 3721 | 27 | * | 4 | 2 | * | 33 | 28 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S39. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Atlanta Field Test - Unit 2
Ambient Water Test at 1.5 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 3-12-79 | 3 | 6 | * | * | * | * | 6 | 91 | 545 | 51 |
| | | (51) | (*) | (11) | (3) | (*) | (65) | | (1110) | |
| 3-14-79 | 1735 | 25 | * | 5 | 2 | * | 32 | 51 | 688 | 26 |
| | | (52) | (*) | (10) | (3) | (*) | (65) | | (925) | |
| 3-16-79 | 2848 | 27 | * | 6 | 2 | * | 35 | 47 | 751 | 51 |
| | | (54) | (*) | (*) | (4) | (*) | (66) | | (1547) | |
| 3-17-79 | 3322 | 26 | * | 5 | 2 | * | 33 | 28 | + | -- |
| | | (35) | (*) | (11) | (*) | (*) | (46) | | (+) | |
| Average THM and NPTOC during test period | | | | | | | (61) | | (1194) | |

*THM concentration < 0.5 ppb.
+Precipitation formed during analysis - invalid results.

TABLE S 40. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Pico Rivera Field Test - Unit 1
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 24 | * | * | * | * | * | * | 99 | 339 | 45 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 625 | 3 | * | * | 1 | 2 | 6 | 14 | 415 | 13 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 1190 | * | * | * | * | * | * | -- | 396 | 24 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-25-79 | 1930 | 4 | * | * | 2 | 3 | 9 | 25 | 365 | 45 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 2201 | 7 | * | * | 2 | 8 | 12 | 33 | 477 | 16 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S41. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Pico Rivera Field Test - Unit 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 11 | * | * | * | * | * | * | 99 | 266 | 57 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 544 | * | * | * | 1 | 1 | 2 | 71 | 166 | 65 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 1107 | * | * | * | * | * | * | -- | 338 | 35 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-24-79 | 1719 | 7 | * | * | 1 | * | * | 25 | 339 | 49 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 2529 | 7 | * | * | 1 | * | 8 | 56 | 361 | 36 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration <0.5 ppb.

TABLE S42. ORGANIC CHEMICAL DATA
Unit: Everpure QC4-THM, Run Number Pico Rivera Field Test - Unit 1
Ambient Water Test at 0.7 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 13 | * | * | * | * | * | * | 99 | 153 | 75 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 120 | * | * | * | 1 | 2 | 3 | 57 | 150 | 69 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 731 | * | * | * | * | * | * | -- | 201 | 62 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-25-79 | 1091 | 7 | * | * | * | 1 | 8 | 25 | 141 | 79 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 1224 | -- | -- | -- | -- | -- | -- | -- | 149 | 74 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S43. ORGANIC CHEMICAL DATA
Unit: Everpure QC4-THM, Run Number Pico Rivera Field Test - Unit 2
Ambient Water Test at 0.7 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 11 | * | * | * | * | * | * | 99 | 230 | 63 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 320 | * | * | * | * | * | * | 99 | 164 | 66 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 491 | * | * | * | * | * | * | -- | 316 | 40 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (513) | |
| 6-24-79 | 903 | 7 | * | * | * | * | 7 | 42 | -- | -- |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 1319 | 6 | * | * | * | * | 6 | 67 | 159 | 72 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S44. ORGANIC CHEMICAL DATA

Unit: Instapure Model F-1C, Run Number Pico Rivera Field Test - Unit 1
Ambient Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 8 | 2 (*) | * (*) | * (*) | 1 (2) | 2 (4) | 5 (6) | 17 | 505 (621) | 19 |
| 6-20-79 | 30 | * (*) | * (*) | * (*) | 2 (2) | 3 (5) | 5 (7) | 29 | 392 (478) | 18 |
| 6-22-79 | 168 | * (*) | * (*) | * (*) | * (*) | * (*) | * (*) | -- | 606 (523) | 0 |
| 6-25-79 | 238 | 3 (5) | * (*) | * (*) | 1 (2) | 3 (5) | 7 (12) | 42 | 447 (661) | 32 |
| 6-26-79 | 268 | 6 (10) | * (*) | * (*) | 2 (2) | 4 (6) | 12 (18) | 33 | 524 (568) | 8 |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S45. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1C, Run Number Pico Rivera Field Test - Unit 2
Ambient Water Test at 1.0 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 11 | * | * | * | * | * | * | 99 | 416 | 33 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 54 | * | * | * | 2 | 3 | 5 | 29 | 543 | 0 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 76 | -- | -- | -- | -- | -- | -- | -- | 403 | 23 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-24-79 | 146 | 8 | * | * | 2 | 3 | 13 | 0 | 569 | 14 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 215 | 6 | * | * | 2 | 5 | 13 | 28 | 673 | 0 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S46. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Pico Rivera Field Test - Unit 1
Ambient Water Test at 1.3 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 20 | * | * | * | * | * | * | 99 | 114 | 82 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 286 | * | * | * | 1 | * | 1 | 86 | 267 | 44 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 1960 | * | * | * | * | * | * | -- | 463 | 12 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-25-79 | 3400 | 4 | * | * | 1 | 1 | 6 | 50 | 545 | 18 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 3888 | 7 | * | * | 1 | 2 | 10 | 44 | 522 | 8 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S47. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Pico Rivera Field Test - Unit 2
Ambient Water Test at 1.3 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-19-79 | 11 | * | * | * | * | * | * | 99 | 161 | 74 |
| | | (*) | (*) | (*) | (2) | (4) | (6) | | (621) | |
| 6-20-79 | 793 | * | * | * | 1 | 2 | 3 | 57 | 366 | 23 |
| | | (*) | (*) | (*) | (2) | (5) | (7) | | (478) | |
| 6-22-79 | 2003 | * | * | * | * | * | * | -- | 471 | 10 |
| | | (*) | (*) | (*) | (*) | (*) | (*) | | (523) | |
| 6-24-79 | 2988 | 10 | * | * | 1 | 2 | 13 | 0 | 450 | 32 |
| | | (5) | (*) | (*) | (2) | (5) | (12) | | (661) | |
| 6-26-79 | 4081 | 6 | * | * | 2 | 2 | 10 | 44 | 477 | 16 |
| | | (10) | (*) | (*) | (2) | (6) | (18) | | (568) | |
| Average THM and NPTOC during test period | | | | | | | (9) | | (570) | |

*THM concentration < 0.5 ppb.

TABLE S48. ORGANIC CHEMICAL DATA
Unit: Aqualux Model HB, Run Number Detroit Field Test - Units 1 and 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| **Test Unit 1** | | | | | | | | | | |
| 6-10-80 | 9 | 1.8<br>(15.2) | *<br>(*) | *<br>(10.1) | *<br>(4.1) | *<br>(*) | 1.8<br>(25.3) | 93 | 910<br>(1658) | 45 |
| 6-12-80 | 405 | 14.6<br>(11.6) | *<br>(*) | *<br>(8.9) | *<br>(4.4) | *<br>(*) | 14.6<br>(24.9) | 41 | 1186<br>(1704) | 30 |
| RUN TERMINATED DUE TO UNIT PLUGGING | | | | | | | | | | |
| **Test Unit 2** | | | | | | | | | | |
| 6-10-80 | 9 | *<br>(15.2) | *<br>(*) | *<br>(10.1) | *<br>(4.1) | *<br>(*) | *<br>(25.3) | 99 | 603<br>(1658) | 64 |
| 6-12-80 | 721 | 3.5<br>(11.6) | *<br>(*) | *<br>(8.9) | *<br>(4.4) | *<br>(*) | 3.5<br>(24.9) | 86 | 991<br>(1704) | 42 |
| 6-15-80 | 1542 | 4.1<br>(13.9) | *<br>(*) | 1.0<br>(6.7) | *<br>(2.5) | *<br>(*) | 5.1<br>(23.1) | 78 | 1491<br>(1786) | 17 |
| Average THM and NPTOC during test period | | | | | | | (24.4) | | (1716) | |

*THM concentration < 0.5 ppb.

TABLE S49. ORGANIC CHEMICAL DATA
Unit: Everpure QC4-THM, Run Number Detroit Field Studies - Units 1 and 2
Ambient Water Test at 0.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| **Test Unit 1** | | | | | | | | | | |
| 6-10-80 | 9 | * (15.2) | * (*) | * (10.1) | * (4.1) | * (*) | * (25.3) | 99 | 351 (1658) | 79 |
| 6-12-80 | 373 | * (11.6) | * (*) | * (8.9) | * (4.4) | * (*) | * (24.9) | 99 | 727 (1704) | 57 |
| 6-15-80 | 905 | 2 (13.9) | * (*) | * (6.7) | * (2.5) | * (*) | 2 (23.1) | 91 | 1058 (1786) | 41 |
| **Test Unit 2** | | | | | | | | | | |
| 6-10-80 | 9 | * (15.2) | * (*) | * (10.1) | * (4.1) | * (*) | * (25.3) | 99 | 326 (1658) | 80 |
| 6-12-80 | 721 | 4.1 (11.6) | * (*) | * (8.9) | * (4.4) | * (*) | 4.1 (24.9) | 84 | 905 (1704) | 47 |
| 6-15-80 | 1542 | 2.0 (13.9) | * (*) | * (6.7) | * (2.5) | * (*) | 2.0 (23.1) | 91 | 1491 (1786) | 17 |
| Average THM and NPTOC during test period | | | | | | | (24.4) | | (1716) | . |

*THM concentration < 0.5 ppb.

TABLE S50. ORGANIC CHEMICAL DATA
Unit: Instapure Model F-1, Run Number Detroit Field Study - Unit 1
Ambient Water Test at 1.1 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 6-10-80 | 3 | 5.4 | * | 4.2 | 2.8 | * | 12.4 | 51 | 1382 | 17 |
| | | (15.2) | (*) | (10.1) | (4.1) | (*) | (25.3) | | (1658) | |
| 6-12-80 | 45 | 7.1 | * | 5.6 | 3.2 | * | 15.9 | 36 | 1685 | 1 |
| | | (11.6) | (*) | (8.9) | (4.4) | (*) | (24.9) | | (1704) | |
| 6-15-80 | 250 | 13.9 | * | 5.8 | 2.7 | * | 22.4 | 3 | 1783 | 0 |
| | | (13.9) | (*) | (6.7) | (2.5) | (*) | (23.1) | | (1786) | |
| Average THM and NPTOC during test period | | | | | | | (24.4) | | (1716) | |

*THM concentration < 0.5 ppb.

TABLE S 51. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Detroit Field Studies - Units 1 and 2
Ambient Water Test at 1.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| **Test Unit 1** | | | | | | | | | | |
| 6-10-80 | 27 | * (15.2) | * (*) | * (10.1) | * (4.1) | * (*) | * (25.3) | 99 | 1060 (1658) | 36 |
| 6-12-80 | 1375 | 3.9 (11.6) | * (*) | 3.6 (8.9) | 2.8 (4.4) | * (*) | 10.3 (24.9) | 59 | 1518 (1704) | 11 |
| 6-15-80 | 3275 | -- (13.9) | -- (*) | -- (6.7) | -- (2.5) | -- (*) | -- (23.1) | -- | 1601 (1786) | 10 |
| **Test Unit 2** | | | | | | | | | | |
| 6-10-80 | 27 | * (15.2) | * (*) | * (10.1) | * (4.1) | * (*) | * (25.3) | 99 | 1049 (1658) | 37 |
| 6-12-80 | 2102 | 6.9 (11.6) | * (*) | 2.4 (8.9) | * (4.4) | * (*) | 9.3 (24.9) | 63 | 1634 (1704) | 4 |
| 6-15-80 | 4279 | 6.2 (13.9) | * (*) | 3.1 (6.7) | 2.3 (2.5) | * (*) | 11.6 (23.1) | 50 | 1776 (1786) | 1 |
| Average THM and NPTOC during test period | | | | | | | (24.4) | | (1716) | |

*THM concentration < 0.5 ppb.

TABLE S52. ORGANIC CHEMICAL DATA
Unit: Aqualux, Model HB, Run Number Home Test
Ambient Water Test at 0.9 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 11-20-78 | ∿0 | 42<br>(117) | *<br>(*) | 6.2<br>(25) | 2.4<br>(9.5) | *<br>(0.6) | 50.6<br>(152) | 67 | 1578<br>(2570) | 39 |
| 11-29-78 | 11 | 24<br>(133) | *<br>(*) | 2.2<br>(30) | 1.2<br>(10) | *<br>(0.7) | 27.4<br>(174) | 84 | 1606<br>(2331) | 31 |
| 12-18-78 | 34 | 24<br>(141) | *<br>(*) | 1.7<br>(16.4) | 0.9<br>(4.0) | *<br>(*) | 26.6<br>(161) | 84 | 1827<br>(2876) | 37 |
| 1-22-79 | 76 | 26<br>(117) | *<br>(*) | 1.6<br>(9.4) | 0.7<br>(7.0) | *<br>(*) | 28.3<br>(133) | 79 | 1371<br>(2113) | 35 |
| 3-23-79 | 148 | 27<br>(111) | *<br>(*) | 1.4<br>(11.9) | *<br>(2.3) | *<br>(*) | 28.4<br>(125) | 77 | --<br>-- | -- |
| 8-4-79 | 308 | 51<br>(194) | *<br>(*) | 3.5<br>(29.5) | 1.4<br>(10.4) | *<br>(*) | 55.9<br>(234) | 76 | 1444<br>(1819) | 21 |
| 8-15-79 | 322 | 68<br>(253) | *<br>(*) | 4.8<br>(32.6) | 1.9<br>(12.0) | *<br>(0.7) | 74.7<br>(298) | 75 | 1598<br>(2091) | 24 |
| 8-26-79 | 337 | 59<br>(218) | *<br>(*) | 3.2<br>(22.4) | 1.4<br>(7.2) | *<br>(*) | 63.6<br>(248) | 74 | 1955<br>(2879) | 32 |
| 8-31-79 | 344 | 45<br>(130) | *<br>(*) | 2.6<br>(15.7) | 0.9<br>(5.2) | *<br>(*) | 48.5<br>(151) | 69 | 1979<br>(2644) | 25 |
| 10-19-79 | 402 | 66<br>(175) | *<br>(*) | 4.9<br>(21.7) | 2.6<br>(7.9) | *<br>(*) | 73.5<br>(205) | 64 | 1896<br>(2495) | 24 |
| 11-11-79 | 430 | 41<br>(115) | *<br>(*) | 4.1<br>(27.1) | 1.5<br>(10.1) | *<br>(*) | 46.6<br>(152) | 69 | 1552<br>(1995) | 22 |

(continued)

TABLE S 52 (continued)
Unit: Aqualux, Model HB, Run Number Home Test
Ambient Water Test at 0.9 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 12-3-79 | 456 | 43 | * | 2.9 | 1.0 | * | 46.9 | 66 | 1653 | 40 |
| | | (116) | (*) | (19.2) | (4.0) | (*) | (139) | | (2747) | |
| 12-18-79 | 474 | 29 | * | 1.5 | 2.0 | * | 32.5 | 73 | 1669 | 34 |
| | | (103) | (*) | (12.6) | (3.8) | (*) | (119) | | (2539) | |
| Average THM and NPTOC during test period | | | | | | | (169) | | (2425) | |

*THM concentration < 0.5 ppb.

TABLE S 53. ORGANIC CHEMICAL DATA

Unit: Instapure, Model F-1C, Run Numbers 1 and 2 for Home Test
Ambient Water Test at 0.4 and 1.4 gpm Flow Rate**

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| **Test Cartridge 1** | | | | | | | | | | |
| 7-11-79 | 4 | 96<br>(152) | *<br>(*) | 13.0<br>(26.0) | 4.4<br>(10.5) | *<br>(*) | 113.4<br>(188.6) | 40 | 1767<br>(2236) | 21 |
| 8-16-79 | 58 | 172<br>(234) | *<br>(*) | 18.4<br>(31.1) | 6.3<br>(10.7) | *<br>(*) | 196.7<br>(275.8) | 29 | 2173<br>(2127) | ∿0 |
| 8-31-79 | 77 | 97<br>(153) | *<br>(*) | 8.7<br>(16.5) | 2.9<br>(5.2) | *<br>(*) | 108.6<br>(174.7) | 38 | 2314<br>(2445) | 5 |
| 11-7-79 | 134 | 107<br>(114) | *<br>(*) | 21.1<br>(24.6) | 8.4<br>(9.7) | *<br>(*) | 136.5<br>(148.3) | 8 | 1981<br>(2223) | 11 |
| **Test Cartridge 2** | | | | | | | | | | |
| 7-10-80 | 4 | 104<br>(168) | *<br>(*) | 12.9<br>(19.4) | 3.9<br>(7.1) | *<br>(*) | 121<br>(195) | 38 | 2396<br>(2360) | ∿0 |
| 7-18-80 | 12 | 99<br>(164) | *<br>(*) | 15<br>(26.9) | 5.4<br>(11.9) | *<br>(*) | 119<br>(203) | 41 | 1961<br>(1828) | ∿0 |
| 8-5-80 | 39 | 93<br>(104) | *<br>(*) | 15.9<br>(21.4) | 5.9<br>(11.9) | *<br>(*) | 115<br>(137) | 16 | 1559<br>(2153) | 26 |

*THM concentration < 0.5 ppb.

**The flow rates are averages of measurements taken during the testing period. The 0.4 gpm was for the cartridge run from July to December 1979 and the 1.4 gpm value was for a second cartridge run during July and August 1980 at a second location.

TABLE S 54. ORGANIC CHEMICAL DATA
Unit: Sears Taste and Odor, Run Number Home Test
Ambient Water Test at 1.6 gpm Flow Rate

| Test date | Gallons processed | Effluent (influent) THM (ppb) | | | | | | Percent reduction THM | Effluent (influent) NPTOC (ppb) | Percent reduction TOC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $CHCl_3$ | $CCl_4$ | $CHCl_2Br$ | $CHClBr_2$ | $CHBr_3$ | Total | | | |
| 2-2-79 | 9 | 2.4 | * | * | * | * | 2.4 | 98 | -- | -- |
| | | (99) | (*) | (9.7) | (1.6) | (*) | (110) | | -- | -- |
| 3-30-79 | 228 | 30 | * | 2.7 | 0.9 | * | 33.6 | 78 | -- | -- |
| | | (121) | (*) | (26.6) | (4.7) | (*) | (152) | | -- | -- |
| 7-10-79 | 615 | 101 | * | 5.6 | 1.8 | * | 108 | 41 | 1247 | 48 |
| | | (149) | (0.6) | (24.8) | (9.5) | (*) | (184) | | (2385) | |
| 8-16-79 | 1230 | 156 | * | 8.5 | 1.9 | * | 166 | 26 | 2003 | 8 |
| | | (191) | (*) | (26.3) | (8.4) | (*) | (2260) | | (2020) | |
| 8-24-79 | 1283 | 131 | * | 5.9 | 1.0 | * | 138 | 26 | 2059 | -- |
| | | (162) | (*) | (17.7) | (5.4) | (*) | (185) | | (--) | -- |
| 9-12-79 | 1417 | 120 | * | 7.6 | 1.6 | * | 129 | 12 | -- | -- |
| | | (122) | (*) | 17.5 | (7.1) | (*) | (147) | | (2246) | |
| 10-18-79 | 1670 | 144 | * | 12.8 | 4.2 | * | 161 | 24 | 2116 | 16 |
| | | (181) | (*) | (23.0) | (7.5) | (*) | (212) | | (2524) | |
| 11-12-79 | 1870 | 102 | * | 14.8 | 4.2 | * | 121 | 11 | 1633 | 16 |
| | | (100) | (*) | (25.8) | (9.6) | (*) | (135) | | (1953) | |
| 11-29-79 | 1914 | 86.6 | * | 5.1 | 0.8 | * | 92.5 | 7 | 1676 | 26 |
| | | (83.5) | (*) | (12.8) | (2.8) | (*) | (99.1) | | (2260) | |
| Average THM and NPTOC during test period | | | | | | | (161) | | (2278) | |

*THM concentration < 0.5 ppb.

TABLE S55. NONPURGEABLE CARBON ADSORBABLE ORGANIC HALIDE (NPCAOX) DATA FOR THE GROUND WATER STUDY

| Test Date | Gallons Processed | Effluent TOX (ppb) | Effluent NPCAOX (ppb) | Estimated*,** Influent NPCAOX (ppb) | Percent* Reduction NPCAOX |
|---|---|---|---|---|---|
| | | Aquacell Bacteriostatic | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-02-80 | 26 | 20.8 | 3 | -- | -- |
| 06-09-80 | 565 | 20.0 | 6 | -- | -- |
| 06-16-80 | 1024 | 26.4 | 3 | -- | -- |
| 06-25-80 | 1517 | 13.7 | 8 | -- | -- |
| 06-30-80 | 1872 | 19.0 | 5 | -- | -- |
| 06-02-80 | 26 | 22.2 | 3 | -- | -- |
| 06-09-80 | 458 | 11.8 | 5 | -- | -- |
| 06-18-80 | 939 | 12.8 | 10 | -- | -- |
| 06-30-80 | 1629 | 14.5 | 2 | -- | -- |
| 07-06-80 | 2036 | 27.8 | 17 | -- | -- |
| | | Aqualux, Model CB-2 | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-02-80 | 16 | 32.3 | 5 | -- | -- |
| 06-09-80 | 579 | 33.0 | 5 | -- | -- |
| 06-16-80 | 1053 | 29.5 | 4 | -- | -- |
| 06-24-80 | 1503 | 23.5 | 6 | -- | -- |
| 06-30-80 | 1961 | 16.5 | 3 | -- | -- |
| 06-02-80 | 16 | 26.2 | 6 | -- | -- |
| 06-09-80 | 506 | 8.8 | 0 | -- | -- |
| 06-18-80 | 990 | 38.0 | 18 | -- | -- |
| 06-30-80 | 1778 | 21.9 | 8 | -- | -- |
| 07-06-80 | 2249 | 29.2 | 19 | -- | -- |
| | | Continental, Model 350 | | | |
| | | Run Numbers 1 and 2 | | | |
| 07-21-80 | 5 | 3.1 | 2 | -- | -- |
| 07-24-80 | 265 | 4.5 | 4 | -- | -- |
| 07-26-80 | 446 | 11.3 | 10 | -- | -- |
| 07-30-80 | 627 | 6.7 | 6 | -- | -- |
| 07-31-80 | 719 | 12.1 | 5 | -- | -- |
| 07-21-80 | 5 | 5.9 | 5 | -- | -- |
| 07-24-80 | 353 | 6.9 | 4 | -- | -- |
| 07-26-80 | 518 | 5.5 | 3 | -- | -- |
| 07-30-80 | 682 | 17.5 | 14 | -- | -- |
| 07-31-80 | 770 | 10.7 | 7 | -- | -- |

(Continued)

TABLE S55. (Continued)

| Test Date | Gallons Processed | Effluent TOX (ppb) | Effluent NPCAOX (ppb) | Estimated*,** Influent NPCAOX (ppb) | Percent* Reduction NPCAOX |
|---|---|---|---|---|---|
| | | Culligan, Model SG-2 | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-02-80 | 15 | 21.7 | 2 | -- | -- |
| 06-16-80 | 1227 | 29.9 | 7 | -- | -- |
| 06-24-80 | 1994 | 12.1 | 6 | -- | -- |
| 07-07-80 | 3163 | 8.9 | 5 | -- | -- |
| 07-16-80 | 4199 | 8.4 | 7 | -- | -- |
| 06-02-80 | 15 | 19.6 | 2 | -- | -- |
| 06-16-80 | 1096 | 22.6 | 5 | -- | -- |
| 06-24-80 | 1852 | 12.8 | 9 | -- | -- |
| 07-07-80 | 2884 | 11.9 | 7 | -- | -- |
| 07-21-80 | 4218 | 4.2 | 2 | -- | -- |
| | | Everpure, Model QC4-THM | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-30-80 | 10 | 31.1 | 8 | -- | -- |
| 07-05-80 | 252 | 11.3 | 7 | -- | -- |
| 07-09-80 | 488 | 48.4 | 0 | -- | -- |
| 07-16-80 | 709 | 4.5 | 2 | -- | -- |
| 07-21-80 | 808 | 2.6 | 1 | -- | -- |
| 06-30-80 | 9 | 22.2 | 4 | -- | -- |
| 07-05-80 | 275 | 22.0 | 14 | -- | -- |
| 07-09-80 | 528 | 6.4 | 2 | -- | -- |
| 07-16-80 | 774 | 2.4 | 1 | -- | -- |
| 07-21-80 | 899 | 5.2 | 2 | -- | -- |
| | | Seagull IV | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-30-80 | 22 | 65.2 | 4 | -- | -- |
| 07-05-80 | 419 | 39.7 | 5 | -- | -- |
| 07-09-80 | 812 | 26.5 | 1 | -- | -- |
| 07-16-80 | 1275 | 22.3 | 1 | -- | -- |
| 07-21-80 | 1712 | 21.7 | 1 | -- | -- |
| 06-30-80 | 26 | 99.2 | 7 | -- | -- |
| 07-05-80 | 348 | 43.0 | 4 | -- | -- |
| 07-09-80 | 666 | 41.4 | 0 | -- | -- |
| 07-16-80 | 1049 | 25.8 | 0 | -- | -- |
| 07-21-80 | 1428 | 25.2 | 3 | -- | -- |

(Continued)

TABLE S55. (Continued)

| Test Date | Gallons Processed | Effluent TOX (ppb) | Effluent NPCAOX (ppb) | Estimated*,** Influent NPCAOX (ppb) | Percent* Reduction NPCAOX |
|---|---|---|---|---|---|
| | | Faucet-Mount Units | | | |
| | | Hurley Town and Country - Run Numbers 1 and 2 | | | |
| 06-02-80 | 8 | 20.3 | 4 | -- | -- |
| 06-18-80 | 1088 | 24.6 | 3 | -- | -- |
| 06-30-80 | 2092 | 10.0 | 7 | -- | -- |
| 07-15-80 | 3184 | 4.6 | 0 | -- | -- |
| 07-25-80 | 4023 | 6.2 | 3 | -- | -- |
| 06-02-80 | 8 | 24.0 | 7 | -- | -- |
| 06-18-80 | 1079 | 26.7 | 4 | -- | -- |
| 06-30-80 | 2102 | 18.9 | 4 | -- | -- |
| 07-15-80 | 3188 | 6.4 | 3 | -- | -- |
| 07-25-80 | 4021 | 7.1 | 2 | -- | -- |
| | | Water Washer, Model 1000 | | | |
| | | Run Numbers 1 and 2 | | | |
| 06-02-80 | 5 | 30.2 | 5 | -- | -- |
| 06-10-80 | 288 | 11.7 | 6 | -- | -- |
| 06-16-80 | 495 | 38.6 | 5 | -- | -- |
| 06-24-80 | 754 | 37.9 | 5 | -- | -- |
| 06-30-80 | 1014 | 37.1 | 1 | -- | -- |
| 06-02-80 | 5 | 22.8 | 3 | -- | -- |
| 06-10-80 | 270 | 17.7 | 6 | -- | -- |
| 06-16-80 | 480 | 25.4 | 7 | -- | -- |
| 06-24-80 | 730 | 34.7 | 3 | -- | -- |
| 06-30-80 | 985 | 43.7 | 5 | -- | -- |
| | | Pour-Through Unit | | | |
| | | Filbrook - Run Numbers 1 and 2 | | | |
| 06-02-80 | 1 | 23.4 | 5 | -- | -- |
| 06-11-80 | 103 | 27.6 | 4 | -- | -- |
| 07-06-80 | 273 | 30.1 | 11 | -- | -- |
| 07-16-80 | 376 | 18.2 | 5 | -- | -- |
| 07-25-80 | 484 | 22.2 | 4 | -- | -- |
| 06-02-80 | 1 | 30.2 | 8 | -- | -- |
| 06-11-80 | 102 | 15.5 | 4 | -- | -- |
| 07-06-80 | 269 | 15.9 | 3 | -- | -- |
| 07-16-80 | 373 | 18.4 | 3 | -- | -- |
| 07-25-80 | 489 | 17.2 | 2 | -- | -- |

TABLE S55. (Continued)

| Test Date | Gallons Processed | Effluent TOX (ppb) | Effluent NPCAOX (ppb) | Estimated*,** Influent NPCAOX (ppb) | Percent* Reduction NPCAOX |
|---|---|---|---|---|---|
| | Stationary Unit | | | | |
| | Sears Taste and Odor - Run Numbers 1 and 2 | | | | |
| 07-06-80 | 0 | 6.8 | 2 | -- | -- |
| 07-11-80 | 800 | 10.6 | 1 | -- | -- |
| 07-16-80 | 1622 | 17.1 | 7 | -- | -- |
| 07-22-80 | 2282 | 13.4 | 4 | -- | -- |
| 07-25-80 | 2774 | 22.9 | 10 | -- | -- |
| 07-06-80 | 0 | 6.8 | 2 | -- | -- |
| 07-11-80 | 820 | 7.8 | 2 | -- | -- |
| 07-15-80 | 1785 | 17.7 | 2 | -- | -- |
| 07-22-80 | 2760 | 15.5 | 4 | -- | -- |
| 07-25-80 | 3349 | 19.6 | 4 | -- | -- |

*Influent levels were at or near the detection limits of the method; therefore, percent reduction calculations are of limited value.
**Spiked ground water influent TOX concentrations.

| Date | NPCAOX | TOX |
|---|---|---|
| 06-02-80 | 5 | 94.2 |
| 06-03-80 | 2 | 20.4 |
| 06-05-80 | 4 | 66.9 |
| 06-09-80 | 2 | 13.8 |
| 07-15-80 | 2 | 132 |
| unspiked well water | 7 | 16.8 |
| unspiked well water | 3 | 15.8 |

TABLE S56. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model CB-2 Run Numbers 3KL1 and 3KL2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 16 | 7800(3100) | 3.2(4.9) | 0.00(0.00) | 18(<1) |
| | 06-9-80 | 579 | 3100(570) | 4.5(3.6) | 0.00(0.00) | 17(<1) |
| | 06-16-80 | 1053 | 2100(2500) | 1.4(2.0) | 0.00(0.00) | 11(<1) |
| a | 06-18-80 | 1053 | 740(1800) | 0.2(1.6) | 0.00(0.00) | NA |
| | 06-24-80 | 1503 | 4400(320) | 1.8(2.1) | 0.00(0.00) | 28(<1) |
| | 06-30-80 | 1961 | 11000(160) | 2.6(3.6) | 0.00(0.00) | 13(<1) |
| b | 07-5-80 | 1961 | 2900(110) | 2.4(8.5) | 0.00(0.00) | NA |
| c | 06-2-80 | 16 | 66000(3100) | 8.8(4.9) | 0.00(0.00) | 15(<1) |
| | 06-9-80 | 506 | 9900(570) | 2.9(3.6) | 0.00(0.00) | 9(<1) |
| | 06-18-80 | 990 | 4700(<A) | 2.0(0.8) | 0.00(0.00) | 9(<1) |
| a | 06-20-80 | 1004 | 610(4700) | 2.0(2.6) | 0.00(0.00) | NA |
| | 06-30-80 | 1778 | 1000(160) | 2.9(3.6) | 0.00(0.00) | 16(<1) |
| | 07-6-80 | 2249 | 3700(180) | 2.9(0.8) | 0.00(0.00) | 17(<1) |
| b | 07-11-80 | 2249 | 51000(330) | 9.2(7.0) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. LA. Laboratory Accidents; Not Analyzed

TABLE S57. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aquacell Bacteriostatic Run Numbers 3WW1 and 3WW2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 26 | 5900(3100) | 2.3(4.9) | 0.00(0.00) | 21(<1) |
| | 06-9-80 | 565 | 6400(570) | 5.0(3.6) | 0.00(0.00) | 5(<1) |
| | 06-16-80 | 1024 | 3800(2500) | 1.5(2.0) | 0.00(0.00) | 11(<1) |
| a | 06-18-80 | 1024 | 1000(1800) | 0.9(1.6) | 0.00(0.00) | NA |
| | 06-25-80 | 1517 | 3200(320) | 3.0(2.1) | 0.00(0.00) | 6(<1) |
| | 06-30-80 | 1872 | 5900(160) | 5.5(3.6) | 0.00(0.00) | 3(<1) |
| b | 07-5-80 | 1872 | 8800(110) | 2.4(1.6) | 0.00(0.00) | NA |
| c | 06-2-80 | 26 | 71000(3100) | 6.3(4.9) | 0.00(0.00) | 18(<1) |
| | 06-9-80 | 458 | 3000(570) | 3.2(3.6) | 0.00(0.00) | 27(<1) |
| | 06-18-80 | 939 | 600(1800) | 1.0(0.8) | 0.00(0.00) | 4(<1) |
| | 06-20-80 | 942 | 30(610) | --[e](2.6) | 0.00(0.00) | NA |
| | 06-30-80 | 1629 | 3900(160) | 3.5(3.6) | 0.00(0.00) | 4(<1) |
| | 07-6-80 | 2036 | 1800(180) | 3.6(0.8) | 0.00(0.00) | 7(<1) |
| b | 07-11-80 | 2036 | 50000(330) | 7.0(7.0) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. Laboratory Accident; Not Analyzed

TABLE S58. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Continental, Model 350 Run Numbers 3IJ1 and 3IJ2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 07-21-80 | 5 | 2500(440) | 11.5(2.4) | 0.00(0.00) | NA |
| | 07-24-80 | 265 | 1600(40 | 1.0(0.7) | 0.00(0.00) | NA |
| | 07-26-80 | 446 | 1300(--)L.A. | 1.2(1.0) | 0.00(0.00) | NA |
| a | 07-28-80 | 452 | 1800(140) | 1.7(--)[e] | 0.00(0.00) | NA |
| | 07-30-80 | 627 | 3500(90) | 1.0(0.7) | 0.00(0.00) | NA |
| | 07-31-80 | 719 | 1700(230) | 0.8(1.7) | 0.00(0.00) | NA |
| b | 08-5-80 | 719 | 11000(240) | 2.0(2.1) | 0.00(0.00) | NA |
| c | 07-21-80 | 5 | 640(340) | 1.6(1.5) | 0.00(0.00) | NA |
| | 07-24-80 | 353 | 1400(40) | 0.8(0.7) | 0.00(0.00) | NA |
| | 07-26-80 | 518 | 1400(--)L.A. | 0.7(1.0) | 0.00(0.00) | NA |
| a | 07-28-80 | 526 | 9100(140) | 3.3(--)[e] | 0.00(0.00) | NA |
| | 07-30-80 | 628 | 12000(90) | 0.9(0.7) | 0.00(0.00) | NA |
| | 07-31-80 | 770 | 1300(230) | 0.7(1.7) | 0.00(0.00) | NA |
| b | 08-5-80 | 770 | 8500(240) | 2.2(2.1) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. La. Laboratory Accident; Not Analyzed

TABLE S59. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Culligan, Model SG-2 Run Numbers 3CD1 and 3CD2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 15 | 25000(3100) | 3.0(4.9) | 0.00(0.00) | NA |
| | 06-16-80 | 1227 | 2500(2500) | 2.0(2.0) | 0.00(0.00) | NA |
| | 06-24-80 | 1994 | 1000(320) | 1.3(2.1) | 0.00(0.00) | NA |
| a | 06-26-80 | 1998 | 810(230) | 3.2(3.8) | 0.00(0.00) | NA |
| | 07-7-80 | 3163 | 960(120) | 1.4(0.8) | 0.00(0.00) | NA |
| | 07-16-80 | 4199 | 940(30) | 2.4(2.9) | 0.00(0.00) | NA |
| b | 07-21-80 | 4199 | 110000(230) | 3.7(8.8) | 0.00(0.00) | NA |
| c | 06-2-80 | 15 | 22000(3100) | 5.9(4.9) | 0.00(0.00) | NA |
| | 06-16-80 | 1096 | LA(2500) | 1.0(2.0) | 0.00(0.00) | NA |
| | 06-24-80 | 1852 | 220(320) | 2.5(2.1) | 0.00(0.00) | NA |
| a | 06-26-80 | 1855 | 730(280) | 2.9(3.8) | 0.00(0.00) | NA |
| | 07-7-80 | 2884 | 1200(120) | 1.4(0.8) | 0.00(0.00) | NA |
| | 07-21-80 | 4218 | 350000(14000) | 1.5(3.3) | 0.00(0.00) | NA |
| b | 07-26-80 | 4218 | 15000(310) | 8.1(1.3) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. Laboratory Accident; Not Analyzed

TABLE S60. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Everpure, Model QC4-THM Run Numbers 3GG1 and 3GG2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-30-80 | 10 | 120(170) | 2.8(3.6) | 0.00(0.00) | NA |
| | 07-5-80 | 252 | 690(90) | 0.9(8.5) | 0.00(0.00) | NA |
| | 07-9-80 | 488 | 3000(1100) | 2.1(1.0) | 0.00(0.00) | NA |
| a | 07-11-80 | 488 | 3100(510) | 6.2(12.5) | 0.00(0.00) | NA |
| | 07-16-80 | 709 | 360(30) | 0.4(2.9) | 0.00(0.00) | NA |
| | 07-21-80 | 808 | 10000(14000) | 1.5(3.3) | 0.00(0.00) | NA |
| b | 07-26-80 | 808 | 8900(310) | 4.0(1.3) | 0.00(0.00) | NA |
| c | 06-30-80 | 9 | --LA(160) | 3.0(3.6) | 0.00(0.00) | NA |
| | 07-5-80 | 275 | 1000(90) | 1.6(8.5) | 0.00(0.00) | NA |
| | 07-9-80 | 528 | 3200(1100) | 0.4(1.0) | 0.00(0.00) | NA |
| a | 07-11-80 | 528 | 270(510) | 6.6(12.5) | 0.00(0.00) | NA |
| d | 07-16-80 | 774 | <10[d](30) | 1.7(2.9) | 0.00(0.00) | NA |
| | 07-21-80 | 899 | 1400(14000) | 1.5(3.3) | 0.00(0.00) | NA |
| b | 07-26-80 | 899 | 790(310) | 5.0(1.3) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. LA. Laboratory Accident; Not Analyzed

TABLE S61. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Seagull IV Run Numbers 3XX1 and 3XX2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-30-80 | 22 | 80(160) | 6.3(3.6) | 0.00(0.00) | NA |
| | 07-5-80 | 419 | 1800(90) | 1.6(8.5) | 0.00(0.00) | NA |
| | 07-9-80 | 812 | 1300(1100) | 2.0(1.0) | 0.00(0.00) | NA |
| a | 07-11-80 | 812 | 14000(510) | 3.5(12.5) | 0.00(0.00) | NA |
| | 07-16-80 | 1275 | 6400(30) | 0.7(2.9) | 0.00(0.00) | NA |
| | 07-21-80 | 1712 | 150000(14000) | 0.6(3.3) | 0.00(0.00) | NA |
| b | 07-26-80 | 1712 | 540000(310) | 3.2(1.3) | 0.00(0.00) | NA |
| c | 06-30-80 | 22 | 60(170) | 5.8(3.6) | 0.00(0.00) | NA |
| | 07-5-80 | 348 | 1100(90) | 0.2(8.5) | 0.00(0.00) | NA |
| | 07-9-80 | 666 | 7400(1100) | 0.2(1.0) | 0.00(0.00) | NA |
| a | 07-11-80 | 666 | 1600(510) | 2.6(12.5) | 0.00(0.00) | NA |
| | 07-16-80 | 1019 | 13000(30) | 2.4(2.9) | 0.00(0.00) | NA |
| | 07-21-80 | 1428 | 18000(14000) | 0.6(3.3) | 0.00(0.00) | NA |
| b | 07-26-80 | 1428 | 6800(310) | 3.3(1.3) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S 62 STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Hurley Town and Country Run Numbers 3HH1 and 3HH2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 7 | 26000(3100) | 2.3(4.9) | 0.00(0.00) | NA |
| | 06-18-80 | 1088 | 49000(1800) | 1.2(0.8) | 0.00(0.00) | NA |
| | 06-30-80 | 2092 | 7000(160) | 1.4(3.6) | 0.00(0.00) | NA |
| a | 07-2-80 | 2097 | <10[d](<10[d]) | 1.8(2.5) | 0.00(0.00) | NA |
| | 07-15-80 | 3184 | 11000(110) | 6.2(1.9) | 0.00(0.00) | NA |
| | 07-25-80 | 4022 | 76000(520) | 3.0(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 4022 | 11000(150) | 6.0(0.7) | 0.00(0.00) | NA |
| c | 06-2-80 | 7 | 16000(3100) | 3.5(4.9) | 0.00(0.00) | NA |
| | 06-18-80 | 1078 | 14000(1800) | 1.5(0.8) | 0.00(0.00) | NA |
| | 06-30-80 | 2102 | 2400(160) | 2.7(3.6) | 0.00(0.00) | NA |
| a | 07-2-80 | 2107 | 1030(<10[d]) | 3.3(2.5) | 0.00(0.00) | NA |
| | 07-15-80 | 3188 | 12000(110) | 7.5(1.9) | 0.00(0.00) | NA |
| | 07-25-80 | 4020 | 16000(520) | 6.6(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 4020 | 37000(150) | 6.4(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S63. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Water Washer, Model 1000 Run Numbers 3KK1 and 3KK2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 4 | 21000(3100) | 2.9(4.9) | 0.00(0.00) | 2(<1) |
| d | 06-10-80 | 288 | 1100(14) | 3.4(3.4) | 0.00(0.00) | 1(<1) |
| | 06-16-80 | 494 | 2500(2500) | 0.2(2.0) | 0.00(0.00) | <1(<1) |
| a | 06-18-80 | 494 | 5500(1800) | 1.1(1.6) | 0.00(0.00) | NA |
| | 06-24-80 | 754 | 1500(320) | 1.7(2.1) | 0.00(0.00) | <1(<1) |
| | 06-30-80 | 1014 | 7300(160) | 2.3(3.6) | 0.00(0.00) | <1(<1) |
| b | 07-5-80 | 1014 | 3300(110) | 1.0(1.6) | 0.00(0.00) | NA |
| c | 06-2-80 | 5 | 36000(3100) | 7.8(4.9) | 0.00(0.00) | 3(<1) |
| d | 06-10-80 | 270 | 3200(14) | 5.0(3.4) | 0.00(0.00) | <1(<1) |
| | 06-16-80 | 480 | 3100(2500) | 1.1(2.0) | 0.00(0.00) | <1(<1) |
| a | 06-18-80 | 480 | 83000(1800) | 1.1(1.6) | 0.00(0.00) | NA |
| | 06-24-80 | 730 | 8600(320) | 3.25(2.1) | 0.00(0.00) | <1(<1) |
| | 06-30-80 | 984 | 6600(160) | 2.3(3.6) | 0.00(0.00) | <1(<1) |
| b | 07-5-80 | 984 | 8700(110) | 2.1(1.6) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S 64. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Filbrook Pour-Through Run Numbers 3SS1 and 3SS2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 06-2-80 | 1 | --[e](3100) | --[e](4.9) | 0.00(0.00) | NA |
| | 06-11-80 | 103 | 1800(2100) | 3.0(3.9) | 0.00(0.00) | NA |
| | 07-6-80 | 273 | 940(180) | 0.4(0.8) | 0.00(0.00) | NA |
| a | 07-8-80 | 273 | 19000(2700) | 1.2(0.4) | 0.00(0.00) | NA |
| | 07-16-80 | 376 | 2700(30) | 0.5(2.9) | 0.00(0.00) | NA |
| | 07-25-80 | 484 | 20000(520) | 3.2(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 484 | 39000(150) | 1.3(0.7) | 0.00(0.00) | NA |
| c | 06-2-80 | 1 | --[e](3100)[f] | --[e](4.9)[f] | 0.00(0.00) | NA |
| | 06-11-80 | 102 | 3300(2100) | 7.5(3.9) | 0.00(0.00) | NA |
| | 07-6-80 | 269 | 1000(180) | 0.4(0.8) | 0.00(0.00) | NA |
| a | 07-8-80 | 269 | 9900(2700) | 0.6(0.4) | 0.00(0.00) | NA |
| | 07-16-80 | 373 | 26000(30) | 1.8(2.9) | 0.00(0.00) | NA |
| | 07-25-80 | 489 | 79000(520) | 3.1(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 489 | 140000(150) | 8.2(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate
e. Laboratory Accident; Not Analyzed
f. Estimated Value

TABLE S65. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor Run Numbers 3CC1 and 3CC2
Water Source: Spiked Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 07-6-80 | 10 | 70(180) | 1.4(8.0) | 0.00(0.00) | NA |
| | 07-11-80 | 800 | 1700(190) | 4.1(1.8) | 0.00(0.00) | NA |
| | 07-16-80 | 1622 | 1100(30) | 2.2(2.9) | 0.00(0.00) | NA |
| a | 07-18-80 | 1628 | 6300(340) | 4.1(1.5) | 0.00(0.00) | NA |
| | 07-22-80 | 2282 | 2200(220) | 1.4(2.0) | 0.00(0.00) | NA |
| | 07-25-80 | 2774 | 1600(520) | 2.5(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 2774 | 5700(150) | 6.2(0.7) | 0.00(0.00) | NA |
| c | 07-6-80 | 20 | 120(180) | 4.0(0.8) | 0.00(0.00) | NA |
| | 07-10-80 | 820 | 36000(340) | 1.4(1.0) | 0.00(0.00) | NA |
| | 07-15-80 | 1785 | 1300(110) | 1.8(1.9) | 0.00(0.00) | NA |
| a | 07-17-80 | 1794 | 3800(10) | 8.5(2.0) | 0.00(0.00) | NA |
| d | 07-22-80 | 2760 | 1400(220) | 1.5(2.0) | 0.00(0.00) | NA |
| | 07-25-80 | 3349 | 2000(520) | 2.0(0.5) | 0.00(0.00) | NA |
| b | 07-30-80 | 3349 | 680(150) | 6.8(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S66. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model HB - Run Numbers: Field Tests 1 and 2
Water Source: Miami Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 1-28-79 | 13 | 6000(1000) | 5.6(5.2) | 0.00(0.13) | 1.5(--) |
| | 2-9-79 | 1066 | 18000(25) | 4.0(1.7) | 0.00(0.21) | 5.8(<1) |
| | 2-13-79 | 1329 | --(--) | SILVER ONLY | --(--) | 16(<1) |
| | 2-15-79 | 1482 | --(--) | SILVER ONLY | --(--) | 4.6(<1) |
| | 2-16-79 | 1509 | --(--) | 3.8(3.3) | 0.00(0.14) | --(--) |
| | 2-22-79 | 2012 | 13000(<1[d]) | 2.2(2.6) | 0.00(0.04) | --(--) |
| e | 3-5-79 | 2012 | 1800(1800) | 4.6(2.5) | 0.11(0.34) | 15(<1) |
| c | 1-28-79 | 11 | 8200(1000) | 1.8(5.2) | 0.05(0.13) | 3(--) |
| | 2-9-79 | 1060 | 4800(25) | 3.6(1.7) | 0.03(0.21) | 3.9(<1) |
| | 2-13-79 | 1349 | --(--) | SILVER ONLY | --(--) | 14(<1) |
| | 2-15-79 | 1505 | --(--) | SILVER ONLY | --(--) | 5.5(<1) |
| | 2-16-79 | 1562 | --(--) | 2.9(3.3) | 0.05(0.14) | --(--) |
| | 2-22-79 | 2014 | 15000(<1[d]) | 5.2(2.6) | 0.06(0.04) | --(--) |
| e | 3-5-79 | 2014 | 3200(1800) | 7.2(2.5) | 0.00(0.34) | 5.5(<1) |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S67. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Everpure QC4-THM - Run Numbers: Field Tests 1 and 2
Water Source: Miami Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 1-28-79 | 14 | 11000(1000) | 2.2(5.2) | 0.00(0.13) | NA |
| | 2-9-79 | 546 | 7900(25) | 5.4(1.7) | 0.04(0.21) | NA |
| | 2-16-79 | 815 | --(--) | 5.4(3.3) | 0.00(0.14) | NA |
| | 2-22-79 | 1014 | 6600(<1[d]) | 5.2(2.6) | 0.00(0.04) | NA |
| e | 3-5-79 | 1014 | 12000(1800) | 5.0(2.5) | 0.00(0.34) | NA |
| c | 1-28-79 | 16 | 14000(1000) | 1.8(5.2) | 0.00(0.13) | NA |
| | 2-9-79 | 576 | 9200(25) | 4.8(1.7) | 0.00(0.21) | NA |
| | 2-16-79 | 879 | --(--) | 2.9(3.3$ | 0.00(0.14) | NA |
| | 2-22-79 | 1105 | 3000(<1[d]) | 4.5(2.6) | 0.03(0.04) | NA |
| e | 3-5-79 | 1105 | 3(1800) | --(2.5) | 0.00(0.34) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 68. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Instapure, Model F-1C - Run Numbers: Field Tests 1 and 2
Water Source: Miami Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 1-28-79 | 5 | 1000(1000) | 3.9(5.2) | 0.06(0.13) | NA |
| | 2-2-79 | 97 | <1[d](25) | 2.9(1.4) | 0.03(0.22) | NA |
| | 2-12-79 | 250 | <1[d](<1[d]) | 2.7(1.6) | 0.06(0.25) | NA |
| e | 2-16-79 | 255 | --(--) | 4.1(1.5) | 0.05(0.14) | NA |
| c | 1-28-79 | 8 | <1[d](1000) | 1.7(5.2) | 0.05(0.13) | NA |
| | 2-2-79 | 94 | 18000(25) | 4.1(1.4) | 0.03(0.22) | NA |
| | 2-12-79 | 240 | 2400(<1[d]) | 2.6(1.6) | 0.06(0.10) | NA |
| e | 2-16-79 | 245 | --(--) | 2.2(1.5) | 0.04(0.14) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S69. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor - Run Numbers: Field Tests 1 and 2
Water Source: Miami Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 1-28-79 | 11 | 2000(1000) | 1.5(5.2) | 0.00(0.13) | NA |
| | 2-9-79 | 1583 | 950(25) | 3.9(1.7) | 0.03(0.21) | NA |
| | 2-16-79 | 2380 | --(--) | 2.3(3.3) | 0.03(0.14) | NA |
| e | 2-22-79 | 3730 | --(< 1[d]) | 6.1(2.6) | 0.03(0.04) | NA |
| c | 1-28-79 | 12 | 66(1000) | 3.6(5.2) | 0.08(0.13) | NA |
| | 2-9-79 | 1494 | 700(25) | 4.0(1.7) | 0.12(0.21) | NA |
| | 2-16-79 | 2547 | --(--) | 3.0(3.3) | 0.04(0.14) | NA |
| e | 2-22-79 | 3441 | 13000(< 1[d]) | 3.2(2.6) | 0.03(0.04) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 70. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model HB - Run Numbers: Field Tests 1 and 2
Water Source: Atlanta Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 3-12-79 | 2 | 380($2^d$) | 3.2(1.6) | 0.00(1.32) | LA |
| | 3-14-79 | 949 | 16$^d$(--) | 2.8(1.8) | 0.06(1.02) | -- |
| | 3-16-79 | 1372 | <1$^d$(<1$^d$) | 4.2(2.9) | 0.03(1.20) | LA |
| | 3-17-79 | 1548 | <1$^d$(1$^d$) | 5.3(5.3) | 0.15(1.40) | -- |
| a | 3-20-79 | 1607 | 1600(1000) | --(--) | 0.00(0.00) | LA |
| e | 3-12-79 | 1 | 170($2^d$) | 3.2(1.6) | 0.00(1.32) | LA |
| | 3-14-79 | 577 | 59(--) | 3.9(1.8) | 0.00(1.02) | -- |
| | 3-16-79 | 1627 | <1$^d$(<1$^d$) | 1.8(2.9) | 0.10(1.20) | LA |
| | 3-17-79 | 1903 | <1$^d$(<1$^d$) | 1.4(5.3) | 0.00(1.40) | -- |
| a | 3-20-79 | 1982 | 2500(1000) | --(--) | 0.00(0.00) | LA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample
LA Laboratory accident

TABLE S 71. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Everpure QC4-THM - Run Numbers: Field Tests 1 and 2
Water Source: Atlanta Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 3-12-79 | 2 | 650($2^d$) | 4.4(1.6) | 0.00(1.32) | NA |
| | 3-14-79 | 518 | 19000(--) | 5.2(1.8) | 0.00(1.00) | NA |
| | 3-16-79 | 982 | <1[d] (<$1^d$) | 3.6(2.9) | 0.00(1.20) | NA |
| | 3-17-79 | 1331 | $4^d$($1^d$) | 5.1(5.3) | 0.00(1.40) | NA |
| a | 3-20-79 | 1433 | 1900(1000) | --(--) | 0.00(0.00) | NA |
| c | 3-12-79 | 2 | 990($2^d$) | 3.9(1.6) | 0.00(1.32) | NA |
| | 3-14-79 | 508 | 18000(--) | 5.4(1.8) | 0.00(1.00) | NA |
| | 3-16-79 | 774 | 110(< $1^d$) | 5.1(2.9) | 0.00(1.20) | NA |
| | 3-17-79 | 970 | 1200($1^d$) | 5.1(5.3) | 0.00(1.40) | NA |
| a | 3-20-79 | 1033 | 3600(1000) | --(--) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 72. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Instapure, Model F-1C - Run Numbers: Field Tests 1 and 2
Water Source: Atlanta Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 3-12-79 | 2 | 59($2^d$) | 3.9(1.6) | 1.00(1.32) | NA |
| | 3-14-79 | 112 | $14^d$(--) | 3.4(1.8) | 0.65(1.00) | NA |
| | 3-16-79 | 159 | $<1^d$($<1^d$) | 2.8(2.9) | 1.20(1.20) | NA |
| | 3-17-79 | 261 | $2^d$($1^d$) | 5.1(5.3) | 1.40(1.40) | NA |
| a | 3-20-79 | 291 | 3200(1000) | --(--) | 0.08(0.00) | NA |
| c | 3-12-79 | 2 | 130($2^d$) | 4.6(1.6) | 0.95(1.32) | NA |
| | 3-14-79 | 98 | 2600(--) | 5.0(1.8) | 0.65(1.00) | NA |
| | 3-16-79 | 174 | <100(<100) | 4.1(2.9) | 0.95(1.20) | NA |
| | 3-17-79 | 223 | $<1^d$($1^d$) | 1.1(5.3) | 1.10(1.40) | NA |
| a | 3-20-79 | 239 | 2000(1000) | --(--) | 0.04(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 73. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor - Run Numbers: Field Tests 1 and 2
Water Source: Atlanta Municipal Drinking

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 3-12-79 | 3 | 180($2^d$) | 3.2(1.6) | 0.00(1.32) | NA |
| | 3-13-79 | 1336 | 68(--) | 3.7(1.8) | 0.03(1.00) | NA |
| | 3-16-79 | 2671 | $1^d$(< $1^d$) | 2.1(2.9) | 0.12(1.20) | NA |
| | 3-17-79 | 3480 | $16^d$($1^d$) | 5.8(5.3) | 0.07(1.40) | NA |
| a | 3-20-79 | 3722 | 560(1000) | --(--) | 0.00(0.00) | NA |
| c | 3-12-79 | 2 | 900($2^d$) | 5.2(1.6) | 0.00(1.32) | NA |
| | 3-14-79 | 1544 | 6600(--) | 6.4(1.8) | 0.00(1.00) | NA |
| | 3-16-79 | 2646 | 10(< $1^d$) | 5.8(2.9) | 0.13(1.20) | NA |
| | 3-17-79 | 3190 | 140($1^d$) | 5.8(5.3) | 0.14(1.40) | NA |
| a | 3-20-79 | 3323 | 1600(1000) | --(--) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S74. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model HB - Run Numbers: Field Tests 1 and 2
Water Source: Pico Rivera Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-19-79 | 24 | 1900(10) | 2.2(2.6) | 0.00(0.00) | 3(<1) |
| | 6-23-79 | 1459 | $<10^d$($<10^d$) | 1.2(1.4) | 0.00(0.00) | |
| | 6-24-79 | 1775 | $<10^d$($<10^d$) | 1.2(0.9) | 0.00(0.00) | 5(<1) |
| | 6-26-79 | 2201 | 770(70) | 1.0(1.3) | 0.00(0.00) | 5(<1) |
| a | 6-29-79 | 2201 | $3^d$($<10^d$) | 2.7(1.0) | 0.00(0.00) | 2(<1) |
| c | 6-19-79 | 11 | $<10^d$($<10^d$) | 2.0(2.6) | 0.00(0.00) | 6(<1) |
| | 6-23-79 | 1343 | $13^d$($<10^d$) | 1.0(1.4) | 0.00(0.00) | |
| | 6-24-79 | 1619 | $<10^d$($<10^d$) | 1.2(0.9) | 0.00(0.00) | 1(<1) |
| | 6-26-79 | 2529 | 130(70) | 2.9(1.3) | 0.00(0.00) | 3(<1) |
| a | 6-29-79 | 2529 | $<10^d$($<10^d$) | 4.3(1.0) | 0.00(0.00) | 2(<1) |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 75. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Everpure QC4-THM - Run Numbers: Field Tests 1 and 2
Water Source: Pico Rivera Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-19-79 | 11 | 560(10) | 2.8(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 837 | <10[d](70) | 1.6(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 1004 | <10[d](<10[d]) | 1.3(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 1224 | 540(70) | 1.0(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 1224 | <10[d](<10[d]) | 3.7(1.0) | 0.00(0.00) | NA |
| c | 6-19-79 | 11 | 1900(10) | 2.9(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 633 | 10(<10[d]) | 1.3(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 842 | <10[d](<10[d]) | 2.5(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 1319 | 90(70) | 1.8(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 1319 | <10[d](<10[d]) | 3.5(1.0) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S76. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Instapure, Model F-1C - Run Numbers: Field Tests 1 and 2
Water Source: Pico Rivera Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-19-79 | 8 | 500(10) | 2.7(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 185 | $<10^d$($<10^d$) | 1.3(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 215 | $<10^d$($<10^d$) | 1.4(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 268 | 110(67) | 1.4(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 268 | $<10^d$($<10^d$) | 1.8(1.0) | 0.00(0.00) | NA |
| c | 6-19-79 | 11 | 1400(10) | 2.9(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 102 | 40($<10^d$) | 1.2(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 132 | $<10^d$($<10^d$) | 1.5(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 215 | 100(67) | 2.4(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 215 | $3^d$($<10^d$) | 1.8(1.0) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 77. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor - Run Numbers: Field Tests 1 and 2
Water Source: Pico Rivera Well Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-19-79 | 20 | 200(10) | 3.1(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 2393 | 3[d](<10[d]) | 2.1(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 3047 | 20(<10[d]) | 2.3(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 3888 | <10[d](67) | 1.7(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 3888 | <10[d](<10[d]) | 1.2(1.0) | 0.00(0.00) | NA |
| c | 6-19-79 | 11 | 2700(10) | 2.1(2.6) | 0.00(0.00) | NA |
| | 6-23-79 | 2362 | 100(<10[d]) | 1.7(1.4) | 0.00(0.00) | NA |
| | 6-24-79 | 2829 | <10[d](<10[d]) | 1.6(0.9) | 0.00(0.00) | NA |
| | 6-26-79 | 4081 | 910(67) | 2.5(1.3) | 0.00(0.00) | NA |
| a | 6-29-79 | 4081 | <10[d](<10[d]) | 3.5(1.0) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 78. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model HB - Run Numbers: Field Tests 1 and 2
Water Source: Detroit Municipal Drinking Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-10-80 | 9 | $<10^d$ ($6^d$) | 0.3(0.8) | 0.00(0.65) | 16(<1) |
| | 6-12-80 | 405 | 50(38) | 1.0(1.0) | 0.00(0.00) | NA |
| | | | TEST RUN TERMINATED | | | |
| c | 6-10-80 | 9 | $460(6^d)$ | 0.7(0.8) | 0.00(0.65) | 21(<1) |
| | 6-12-80 | 381 | 10(38) | 1.0(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 906 | $96(5^d)$ | 3.0(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 906 | $66(<10^d)$ | 2.1(0.7) | 0.00(0.00) | 18 |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S79. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Everpure QC4-THM - Run Numbers: Field Tests 1 and 2
Water Source: Detroit Municipal Drinking Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-10-80 | 9 | 130(6) | 0.8(0.8) | 0.00(0.65) | NA |
| | 6-12-80 | 373 | 170(38) | 2.5(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 905 | 2800($5^d$) | 1.5(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 905 | 5500($<10^d$) | 1.3(0.7) | 0.00(0.00) | NA |
| c | 6-10-80 | 9 | 90($<10^d$) | 0.6(0.8) | 0.00(0.65) | NA |
| | 6-12-80 | 721 | 53(38) | 1.7(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 1542 | 230($5^d$) | 1.1(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 1542 | 8700($<10^d$) | 1.7(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 80. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Instapure, Model F-1C - Run Number: Field Test 1
Water Source: Detroit Municipal Drinking Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-10-80 | 2.5 | 10($6^d$) | 0.5(0.8) | <0.28(0.65) | NA |
| | 6-12-80 | 44.5 | 28(38) | 1.0(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 250.5 | 50(5) | 2.2(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 250.5 | 380(<$10^d$) | 0.7(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S 81. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor - Run Numbers: Field Tests 1 and 2
Water Source: Detroit Municipal Drinking Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| c | 6-10-80 | 27 | $<10^d$ ($6^d$) | 0.6(0.8) | 0.00(0.65) | NA |
| | 6-12-80 | 1375 | 43(38) | 0.9(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 3275 | 4300($5^d$) | 2.4(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 3275 | 100($<10^d$) | 1.0(0.7) | 0.00(0.00) | NA |
| c | 6-10-80 | 27 | 120($<10^d$) | 0.7(0.8) | 0.00(0.65) | NA |
| | 6-12-80 | 2202 | 33(38) | 0.8(1.0) | 0.00(0.00) | NA |
| | 6-15-80 | 4279 | 110($5^d$) | 1.2(1.2) | 0.00(0.00) | NA |
| a | 6-18-80 | 4279 | 65($<10^d$) | 1.7(0.7) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.
e. 10 Day Stagnation Sample

TABLE S82. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Aqualux, Model HB, Home Test
Water Source: New Orleans Tap Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| | 11-20-78 | 0 | 41000(110000) | --(3.4) | 0.00(0.03) | 5.2 |
| | 11-23-78 | 4 | 200000(120000) | 4.6(3.2) | 0.00(0.00) | |
| | 11-29-78 | 11 | 1200(930) | 5.0(2.8) | 0.00(0.00) | 4.6 |
| | 12-18-78 | 34 | 650(< $10^d$) | 5.8(3.8) | 0.00(0.00) | 1 |
| | 1-22-79 | 76 | 1400(240) | 3.8(2.8) | 0.00(0.00) | |
| | 3-23-79 | 148 | 80(< $10^d$) | 2.8(3.0) | 0.00(0.00) | 1.4 |
| | 8-4-79 | 308 | $11^d$(600) | --(--) | 0.00(0.00) | <1 |
| | 8-15-79 | 322 | 620(< $10^d$) | 2.7(6.7) | 0.00(0.00) | <1 |
| | 8-19-79 | 328 | 2700(660) | 3.0(3.4) | 0.00(0.00) | <1 |
| | 8-26-80 | 337 | 720(92) | 2.5(3.0) | 0.00(0.00) | 1.7 |
| | 8-31-79 | 344 | 3700(60) | --(--) | 0.00(0.04) | <1 |
| | 10-19-79 | 402 | <$1^d$(< $1^d$) | --(--) | 0.00(0.00) | <1 |
| | 11-11-79 | 430 | 110(130) | 5.6(2.9) | 0.00(0.04) | <1(<1) |
| | 12-3-79 | 456 | 530(39) | 5.0(4.4) | 0.00(0.00) | |
| | 12-18-79 | 474 | 370(240) | 3.0(6.6) | 0.00(0.00) | |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S83. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Instapure, Model F-1C, Home Test
Water Source: New Orleans Tap Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| | 7-11-79 | 4 | 240(230) | 5.8(2.5) | 0.19(0.53) | NA |
| | 8-16-79 | 58 | <1[d](10) | 2.2(6.8) | 0.32(0.39) | NA |
| | 8-27-79 | 70 | <1[d](<1[d]) | 2.8(1.9) | 0.59(0.96) | NA |
| | 8-31-79 | 77 | 59(<1[d]) | 7.7(4.0) | 0.25(0.49) | NA |
| | 11-7-79 | 134 | 100(150) | 4.4(2.5) | 0.84(0.90) | NA |
| | 12-10-79 | 183 | 210(2) | 5.0(2.0) | 0.30(0.62) | NA |
| | 12-21-79 | 200 | --(--) | 4.5(3.5) | 0.36(0.72) | NA |
| | 7-10-80 | 4 | 20(10) | 1.4(1.4) | 0.00(0.08) | NA |
| | 7-14-80 | 6 | 3900(30) | 1.2(2.5) | 0.00(0.00) | NA |
| | 7-18-80 | 12 | 1500(660) | 1.3(2.2) | 0.00(0.06) | NA |
| | 8-5-80 | 39 | 20(20) | 1.7(1.5) | 0.00(0.00) | NA |
| | 8-13-80 | 51 | <1[d](10) | 3.1(3.9) | 0.00(0.00) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S84. STANDARD PLATE COUNT, ENDOTOXIN, CHLORINE, AND SILVER DATA

Unit: Sears Taste and Odor, Home Test
Water Source: New Orleans Tap Water

| Sample Type | Date | Gallons Processed | Unit (Control) spc/ml | Unit (Control) Endotoxin (ng/ml) | Unit (Control) Free $Cl_2$ (ppm) | Unit Silver (ppb) |
|---|---|---|---|---|---|---|
| | 2-2-79 | 9 | < 100(15[d]) | 3.1(5.8) | 0.00(0.00) | NA |
| | 2-7-79 | 30 | 900(45) | 3.8(3.6) | 0.00(0.42) | NA |
| | 2-25-79 | 97 | --(--) | 5.8(3.2) | 0.00(0.30) | NA |
| | 7-10-79 | 615 | 100(90) | 7.2(2.9) | 0.00(0.80) | NA |
| | 8-16-79 | 1230 | 1100(2400) | 2.0(4.9) | 0.00(0.53) | NA |
| | 8-24-79 | 1283 | 190(220) | --(--) | 0.00(0.81) | NA |
| | 9-12-79 | 1417 | --(--) | 2.0(1.9) | 0.00(1.40) | NA |
| | 10-18-79 | 1670 | 62(< 1[d]) | 4.9(2.3) | 0.05(1.18) | NA |
| | 11-12-79 | 1870 | 190(240) | 6.5(2.5) | 0.00(1.05) | NA |
| | 11-29-79 | 1914 | 300(5) | --(--) | 0.00(0.61) | NA |

a. 2 Day Stagnation Sample
b. 5 Day Stagnation Sample
c. Running Water Sample
d. Estimated Standard Plate Count/ml.

TABLE S 85. SITE DATA FOR HOME STUDY UNITS

| Model | Data | |
|---|---|---|
| Aqualux Model HB | Location: | 4700 Block Citrus Dr. New Orleans, LA |
| | Occupancy: | 2 adults, 1 child |
| | Test Dates: | 11/20/78 - 12/19/79 |
| | Estimated Usage: | 1.2 gallons per day |
| Sears Taste and Odor | Location: | 1400 Block Crescent St. New Orleans, LA |
| | Occupancy: | 2 adults, 2 children |
| | Test Dates: | 2/2/79 - 12/19/79 |
| | Estimated Usage: | 6.4 gallons per day |
| Instapure Model (Test 1) | Location: | 4600 Block Baccich St. New Orleans, LA |
| | Occupancy: | 3 adults |
| | Test Dates: | 7/11/79 - 12/21/79 |
| | Estimated Usage: | 1.5 gallons per day |
| Instapure Model (Test 2) | Location: | 4700 Block Citrus Dr. New Orleans, LA |
| | Occupancy: | 2 adults, 1 child |
| | Test Dates: | 7/10/80 - 8/13/80 |
| | Estimated Usage: | 1.2 gallons per day |

TABLE S86. TENTATIVE IDENTIFICATIONS OF COMPOUNDS EXTRACTED OF THE SPENT CARBON FROM THE HTU-03-AQUALUX, MODEL CB-2

| Spectrum number | Tentative identification of compound* |
|---|---|
| 1 | 2-pentanone, 4-hydroxy-4-methyl |
| 2 | ethanol, 2-butoxy |
| 3 | 3 pentene-1-yne + phenol |
| 4 | 1 pentene-3-yne + phenol |
| 5 | 2-pentene, 5 butoxy |
| 6 | hexanoic acid |
| 7 | ethanol, 1-(2-butoxyethoxy) |
| 8 | mixture |
| 9 | 2-decanol |
| 10 | mixture |
| 11 | butanoic acid, 4-methoxy |
| 12 | mixture (hydrocarbon) |
| 13 | 3-decen-2-one |
| 14 | 1-nonanol |
| 15 | mixture, 1,5-hexadiene-3,4-diol, 3,4-dimethyl |
| 16 | diethyl phthalate |
| 17 | mixture |
| 18 | mixture, acetic acid octyl ester |
| 19 | mixture, nonadecanol |
| 20 | mixture, 9,12-octadecadienal |
| 21 | mixture, disulfide, bis(3-methylbutyl) |
| 22 | mixture, acetic acid octyl ester |
| 23 | mixture, substituted benzofuranone |
| 24 | mixture, 1,9-nonanediol |
| 25 | undecanoic acid, methyl ester |
| 26 | mixture, 2,6-nonadienoic acid, 7-ethyl-3-methyl, methyl ester |
| 27 | mixture, 1-octadecene |
| 28 | mixture, tridecane-6-propyl |
| 29* | octanoic acid, alkyl ester |
| 30 | mixture |
| 31 | mixture, 9-hexadecenoic acid, methyl ester |
| 32 | mixture, tetrachloro-hydrocarbon (chlordane derivative) |
| 33 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 34 | mixture, hexadecanoic acid |
| 35 | mixture, substituted glycol ether |
| 36 | mixture, chlorinated compound + hydrocarbon |
| 37 | mixture, 1-hexacosanol |
| 38* | unknown (alkyl alcohol such as farnesyl derivative) |
| 39 | phthalate |
| 40 | substituted hydrocarbon (geranyl or farnesyl derivative) |
| 41 | substituted alkene, (9,12,15-octadecatrienal) |
| 42 | substituted alkene |

*Tentative identifications were made by comparison of spectra manually or by a computer search of the 32,000 spectra in the NIH-EPA mass spectral library. Only compound matches greater than 0.97 are listed [1.00 means that individual mass spectrum (obtained from extract) is identical with the mass spectrum in the mass spectral library].

TABLE S 87. TENTATIVE IDENTIFICATIONS OF COMPOUNDS EXTRACTED OF THE SPENT CARBON FROM THE HTU-02-HURLEY TOWN AND COUNTRY

| Spectrum number | Tentative identification of compound * |
|---|---|
| 1 | 2-pentanone, 4-hydroxy-4-methyl |
| 2 | ethanol-2-butoxy |
| 3 | mixture, phenol |
| 4 | 2-heptanone, 6-methyl (128) |
| 5 | mixture 2,3-octanedione |
| 6 | 1-propanol, 2-(2-hydroxypropoxy)- |
| 7 | tetradecane (hydrocarbon) |
| 8 | mixture, 1-propen-2-ol acetate |
| 9 | mixture, poor spectrum |
| 10 | mixture, poor spectrum |
| 11 | mixture, butanoic acid, 4-methoxy |
| 12 | mixture |
| 13 | mixture, chlorinated compound-trichlorophenol-derivative |
| 14 | 9-hexadecenoic acid, methyl ester |
| 15 | eicosonoic acid, methyl ester |
| 16 | 1-pentadecene |
| 17 | mixture, chlorinated compound (chlordane derivative) |
| 18 | mixture, chlorinated compound (chlordane derivative) |
| 19* | mixture, chlorinated compound (chlordane derivative) |
| 20 | mixture, chlorinated compound (chlordane derivative) |
| 21 | mixture, chlorinated compound (chlordane derivative) |
| 22 | mixture, chlorinated compound (chlordane derivative |
| 23 | mixture, chlorinated compound (chlordane derivative) |
| 24 | mixture, chlorinated compound (chlordane derivative) |
| 25 | phthalate |
| 26 | unknown, geranyl or farnesyl derivative |
| 27 | phthalate |
| 28 | unknown, geranyl or farnesyl derivative |

*Tentative identifications were made by comparison of spectra manually or by a computer search of the 32,000 spectra in the NIH-EPA mass spectral library. Only compound matches greater than 0.97 are listed [1.00 means that individual mass spectrum (obtained from extract) is identical with the mass spectrum in the mass spectral library].

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TABLE S88. TENTATIVE IDENTIFICATIONS OF COMPOUNDS EXTRACTED OF THE SPENT CARBON FROM THE HTU-01-SEARS TASTE AND ODOR

| Spectrum number | Tentative identification of compound* |
|---|---|
| 1 | 2-pentanone,4-hydroxy-4-methyl |
| 2 | ethanol, 2-butoxy |
| 3 | mixture, phenol |
| 4 | mixture |
| 5 | mixture, 1-butene- yne-2-methyl |
| 6 | 5-hexene-2-one |
| 7 | phthalate |
| 8 | mixture |
| 9 | unknown |
| 10 | unknown, acetic acid octyl ester + chlorinated compound |
| 11 | mixture, docosene + chlornated compound |
| 12 | mixture, 1-octadecene |
| 13 | mixture, 1-eicosanol |
| 14 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 15 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 16 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 17 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 18 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 19 | mixture, chlorinated hydrocarbon (chlordane derivative) |
| 20 | mixture, 1,3-cyclopentadiene hexachloro |
| 21 | mixture, chlorinated hydrocarbon |
| 22 | mixture, chlorinated hydrocarbon |
| 22 | mixture, chlorinated hydrocarbon |
| 23 | unknown, alkyl acid ester |
| 24 | phthalate |

*Tentative identifications were made by comparison of spectra manually or by a computer search of the 32,000 spectra in the NIH-EPA mass spectra library. Only compound matches greater than 0.97 are listed [1.00 means that individual mass spectrum (obtained from extract) is identical with the mass spectrum in the mass spectral library].